

**A STUDY OF THE EFFECT OF PRODUCT INFORMATION CUES ON
CONSUMERS' PURCHASE DECISION-MAKING OF UNKNOWN BRANDS**

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Doctor of Philosophy

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DECLARATION

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STATEMENT OF ETHICAL CONDUCT

The research associated with this thesis abides by the international and Australian codes on human and animal experimentation, the guidelines by the Australian Government's Office of the Gene Technology Regulator and the rulings of the Safety, Ethics and Institutional Biosafety Committees of the University.

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ABSTRACT

China is rapidly becoming an important market for consumer goods. Though branding across a number of product categories in the context of the Chinese market is well studied, relatively little is known about how consumers respond to products carrying brands that are neither known nor familiar with. In order to address this gap of research, the purpose of this study is to gain an insight into how Chinese consumers utilise product attribute cues to evaluate product quality and their intention to purchase, particularly towards unknown brands.

Through a review of relevant theories and literature, this study comprehensively identified and analysed all major external product cues which may directly influence consumers' perception towards unknown brands. In particular, this study created a multi-cue situation to understand consumers' decision-making process with all product cues presented to consumers simultaneously for consumers to evaluate. Field experiment was employed and the data was analysed using conjoint analysis and 2x2x2x2 factorial design. The results of the experiment indicated that price similarity and package similarity, among all other external factors, exhibited the highest level of influence in consumers purchase decision-making under the shopping context. Retailer image exhibited moderate level of influence in the decision-making process while third party organisation endorsement does not show significant influence. Significant interaction effect was also found between price similarity and package similarity indicating the congruence signal of external cues also affect consumers decision-making significantly.

This research contributes by extending the application of existing cue utilisation theory to the context of unknown brands. By combining signalling theory and assimilation/contrast theory,

this research proposed two unique external product cues that were critical to consumers' decision-making process but largely neglected by previous studies.

This research highlights that it is important for marketers to understand how to manipulate external product cues to shift the position of their brands into consumers evoked set. In addition to this, it is important for marketers to know the investment towards which external factors are most cost-effective and can make their brands “stand out” easier and sooner. Furthermore, this research suggests that marketers are required to ensure the external product cues are sending consistent signals to enhance the positive effect of cue manipulation.

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CHAPTER 1: INTRODUCTION

1.1 CHAPTER OVERVIEW

This chapter provides the definition of unknown brands, discusses the current problem of unknown brands in the context of China's fast-developing market, and the significance of studying unknown brands. This chapter is structured into three main parts. Firstly, it is necessary to present the current situations of unknown brands in the global market, which leads to an overview of the practical context of the research. The second part will be devoted to unknown brands and the consumer behaviour characteristics in China which helps to understand the background of the study. Then the relevance and significance of studying unknown brands consumption in China will be discussed.

1.2 UNKNOWN BRANDS IN WORLDWIDE

In the western market, the studies of brands with "unknown" features have generally been focusing on the "generic brands". One of the most impressive marketing phenomena that the business world saw in the twentieth century was the rapid rise of generic brands (Herstein & Sigal, 2007). The era of the meteoric rise of generic brands began in 1976 in France, when the Carrefour chain began selling 50 no-name brands in 38 of its stores (Hawes, 1982). These products were marked by their simple white packaging that emphasised the package's contents, in comparison to the familiar promotional labels. Generic brand grocery products were 30 to 40 per cent less expensive than respective manufacturers' brands, and about 20 per cent below the retail price of respective private brands (Hawes & Kiser, 1980). These low

prices were possible by virtue of the reduced costs of packaging and promotion (Prendergast & Marr, 1997). Product quality of generic brands was considered inferior to that of manufacturers' brands. In a sense, generic brands were a second private brand- an additional level of a private brand (Herstein & Sigal, 2007). The concept behind marketing generic brands was to compete against manufacturers' brands in the belief that some consumers had become sceptical about the link between quality and manufacturers' brands, and that these consumers would be willing to purchase generic brands at a lower price, especially during economically hard times.

Generic brands were first marketed in the USA in 1977 by the Jewel supermarket chain of Chicago. This chain began with 44 no-name brands. The demand for generic brands was so impressive that the chain increased the number of generic brands to 100 (Fitzell, 1998). By 1979, generic brand marketing had penetrated most Western countries and had reached Canada, Australia and Japan (McGoldrick, 1981). In practice, the actions of distributors in marketing generic brands induced many consumers to substitute their regular private brand by a generic one. Research conducted by SAMI (Selling Areas-Marketing, 1983) shows that in 1982 generic brands attained a significant portion of the market by encroaching on the market share of private brands, without diminishing the market share of national brands.

When many consumers later became dissatisfied with generic brands because of their inferior quality, they returned to purchasing better known products, national brands, and gradually deserted private brands (Cunningham et al., 1982). For a decade starting in the mid-1980s through to the mid- 1990s, generic brands became unimportant in the eyes of many retailers. According to Harris and Strang (1985), the fundamental reason for the mismanagement of generic brands by retailers lies in the adoption of short-term marketing strategies that could

not compete with the established national brands. Nevertheless, during the mid-1990s generics reappeared in stores. According to de Chernatony and McDonald (1998), the reason for their re-introduction may have been a response to the aggressive marketing of discount stores.

Despite the extensive marketing interest in generic brands, the definition of this term is discordant. Generally, generic brands usually refer to consumer goods with no brand name and unknown manufacturer (Murphy & Laczniak, 1979), however, they sometimes can be referred to as “second private brands” that are manufactured by retailers which are similar to private label brands (Herstein & Sigal, 2007). They usually imitate those more expensive, national brands, competing on price and are often of the equal quality of the former (Murphy & Laczniak, 1979). On the other hand, generic brands are distinguished by the absence of a brand name, but it is often inaccurate to describe these products as “lacking a brand name” due to the fact that some of these brands actually are branded, albeit with either the brand of the store in which they are sold or a lesser-known brand name which may not be aggressively advertised to the public. Generic brands may not only come from small to medium sized companies, but some large corporations adopt generic brands as part of their marketing strategies, manufacturing such brands on the same production line as their “named” brands but labelled with a generic name (e.g. Proctor and Gamble). Those brands will then be sold on market as competitors for their main brands in order for the company to acquire a higher market share. In this way, the definition of generic brands can cover three different product types, those produced by SMEs and sold as supermarket home brands, those produced by SMEs and sold under a lesser-known or unknown brand name, and those produced by the large corporations but sold with brand names that are different from company’s main brands. Looking into the different types of generic brands, the first type relates to store brands has

been well-studied in the previous marketing and branding literature in the recent years (Robert et al., 2010, Dany et al., 2013, Wu et al., 2011, Beneke et al., 2012, Jin & Yong, 2005) while the other two types had received little attention. The latter refers to those products produced by SME or large corporation and sold with brand names consumers are not familiar with. Nevertheless, regardless of the origin of the brands, from the perspective of the consumers, there is one thing in common: the lack of consumers' recognition of brand names. Therefore, in order to avoid the controversial definition of brands with such features, brands with such features are defined in a more accurate and precise way as "unknown brands". For the purpose of this study, the boundary of "unknown brands" includes both non-staple products and labelled products with brand names consumers cannot recognise or are not familiar with.

It is believed the small to medium sized enterprises (SMEs) account for the production of majorities of products with unknown brands, and that the sales and profit of most of these SMEs have been suffering from non-brand issues in the world market (Martin, 2006). These unknown brands and their manufacturers are of critical importance to the functioning of national economies and are playing an increasing role in the world economy. Globalization and the emergence of internationally active SMEs are key worldwide trends (Knight, 2000) and as a result of which, products with brands unknown to customers are now flooding over the world consuming market. In this globalization era, with the development of communication, information, and transportation technologies, a growing number of unknown-brand-producing companies, with SMEs accounting for most, are entering world markets as exporters, participants in leasing agreements, partners in joint ventures and founders of overseas subsidiaries (Andrei, 2008). These companies provide a substantial share of current employment and future growth prospects in many countries worldwide

(OCED, 2010, OECD, 2004, Oviatt & McDougall, 1994) and have contributed more than 35% of exports from Asia and more than 25% of exports from the rest of the world (Ausland & Johnson, 2004). In some countries such as China, India, South Korea and Italy, these companies account for over 60% of total national exports (Ausland & Johnson, 2004). Despite their importance to international business, very little research has focused on either unknown-brand-producing companies or SMEs in general. The non-brand issue restricts these companies to the bottom of the value chain to either produce low-end products and sell them at a cheap price or become a pure manufacturer for large corporations, which is particularly the case in China (Martin, 2006). From time to time, the low value margin limits the finance of these companies and defeats the faith of entrepreneurs on the growth of their business. Given these companies usually suffer from limited finance and cannot afford massive advertising campaign to build strong brand identity, the question lies on how these unknown-brands-producing companies can find another way to survive in the regional, national and world market and make their brands and products stand out among the peers.

Another problem for unknown brands is, despite lower prices, quality guarantees, even with the advertising of such products, consumers continue to prefer well-known brands even if that means they have to pay much higher prices for the same level of quality (Shaprio, 1993). Research regarding grocery store brands and generic grocery brands had showed substantial interest in this phenomenon. A variety of studies have been undertaken to investigate the marketing techniques for store brand products as well as the generics (Burck, 1979, Hawes & Kiser, 1982, Raj, 2009, Robert et al., 2010, Wu et al., 2011, Beneke et al., 2012, Jin & Yong, 2005). Although these studies provide useful insights for possible marketing strategies of unknown brands, they do not address the central managerial question of what makes the consumers buy products with brands they do not know. Thus, marketers of unknown brands

are left in an uncomfortable position of not knowing what to do in order to manage their marketing mix as well as enhancing their market share. Due to this, a study on how consumers perceive and behave to products with unknown brands is needed and will have great significance within marketing theory and to those unknown-brand-producing companies for their future products marketing and long term brand development.

1.3 THE ISSUES OF UNKNOWN BRANDS IN CHINA

China has undergone considerable social and economic changes in recent years. An implementation of an opening up to the outside world has transformed the Chinese economic landscape since the 1970s, to a society of consumption (IMF, 2013b). As the second largest economy entity in the world by nominal GDP, China has achieved a gross domestic product (GDP) amounting to 8,227 billion U.S. dollars in 2012 and 9,020 U.S. dollars in 2013 (IMF, 2013a). With an annual growth rates averaging 10% over the past 30 years, China has come to the second place in the world by the summer of 2012 and has become a market with great volume and huge potential for businesses (IMF, 2013a). China is also the largest exporter and second largest importer of goods in the world. As a result, more Chinese consumers are in a position to face and purchase a wide variety of brands manufactured by small-to-medium sized enterprises and with names consumers do not know. As mentioned, these brands with the specific “unknown characteristics” in this thesis were defined as “unknown brands”.

1.4 CHINA'S ECONOMIC AND MARKET CONDITION

For Chinese enterprises, development of the brand is a complicated matter because economic change took place very quickly, even though there were some positive factors that help Chinese companies to grow in recent years. China has one of the fastest growing economies in the world (IMF, 2013a). Added to this is the fast growing middle class of about 200 million customers who will increasingly be able to and willing to pay higher prices to own their favourite branded goods (Yuval et al., 2012). To make market conditions even more conducive for enterprises, the Chinese government has been allowing private companies in an increasing number of different industry sectors. The changing environment has provided many positive factors to Chinese companies, but there are a lot of inherent challenges that Chinese companies have to overcome before becoming noted brands. Indeed, Chinese companies need to quickly understand the essence of a brand before being left out of the competitive market.

Currently, Chinese consumers are quite flexible when choosing products in the market (Yuval et al., 2012). Being better informed, Chinese consumers are seeking what suits them and not exclusively foreign brands. At the same time, they like the brands and products which can provide better assurance and higher quality (Yuval et al., 2012). Therefore, some local brands with special characteristics are still quite in demand and such brands can still have great potential in China's huge market. According to a study cited recently by the Financial Times, China is the third world market for luxury products with annual sales of two billion U.S. dollars and growth prospects 20 per cent annually until 2008 and 10 per cent up in 2015 (Yuval et al., 2011). However, even though China is projected as the goldmine that all companies want to reap from, it still is a developing nation. Only around 150 to 200 million

Chinese of the total 1.2 billion are moving up the pyramid into middle class and have the resources to indulge in consumer products (Yuval et al., 2012). There is a huge divide between the haves and the have-nots. Cities such as Beijing and Shanghai have become the clusters for the new affluent class and many of the interior cities and towns are still predominantly rural (N.B.S.C., 2013). Given this huge disparity, it is only natural that companies are still grappling with their strategies for the Chinese market. The evolution and current situation of China's economy show without doubt the unique characteristics of this emerging market. In this context, to attract Chinese consumers, Small-to- Medium sized companies in China must have a thorough understanding of their ways of thinking, their values and decision-making levers to make the smart and accurate marketing decisions.

The consumers' quality perception and intention to purchase towards the not-well-known brands has long been the subject of numerous studies in the western countries through the research on generic brands and private label brands (Cunningham et al., 1982, Fitzell, 1998, Herstein & Sigal, 2007, Prendergast & Marr, 1997, Selling Areas-Marketing, 1983, Beneke et al., 2012, Dany et al., 2013, Jin & Yong, 2005, Robert et al., 2010, Wu et al., 2011). Yet the previous research has not sufficiently and theoretically studied Chinese consumers, following a rigorous methodology, even if such studies may obtain greater importance to both academia and the practitioners. Therefore, previous researchers were not able to fully extend many high level marketing theories in the past to the context of China's market, which has limited the potential significance of these theories. Under such context, a study applying existing marketing theories to the context of unknown brands in China in order to gain better understanding regarding how culture differences characterise the people in China and how behaviours of consumers intimately linked to the combined shopping experience of generations of Chinese, as well as how the attitudes towards these unknown brands influence

consumers decision making, may significantly contribute to not only the extension of marketing theories but also the implications to business practitioners.

1.5 THE IMPORTANCE OF BRANDING FOR CHINA'S SMEs

The statistics on China's recent economic development provide substantial reason for such tremendous interest by the global media and companies in China (Gao et al., 2006). Even though these numbers paint a very vibrant, strong and thriving picture of the Chinese economy, one very crucial aspect of capitalistic economies is very conspicuous by its absence – Chinese brands. Much of the current Chinese success can be attributed to the low cost that Chinese companies have managed to achieve over the years. Further, the sheer size of the market also has allowed Chinese companies to grow substantially (Gao et al., 2003). But with the liberalization of the Chinese economy, the impending global competitors in China pose very grave challenges to such growth. Building strong brands that can offer companies real differentiation seems to be the only source of long term competitive advantage.

Branding is one of the most misunderstood terms in the business lexicon. Branding has been misconstrued to mean different things over the period (Roll, 2008). Everything from design, logo, trademark and packaging to a unique name has been equated to a brand. Before companies begin their branding journey, they must fully understand the meaning of branding and the enormous role it plays in furthering a company's fortunes. Branding is a strategic boardroom discipline that encompasses all functions in any organization and allows companies to enhance shareholder value and maximise market capitalization (Shamoon & Saiqa, 2011, Keller, 2003). For long, Chinese companies have equated branding with advertising campaigns that are handled by the middle level marketing managers and thus

have limited branding to a day to day tactical capacity (Yuval et al., 2012) . Branding incorporates the strategic elements of the customer touch points to ensure that the brand promises are consistently delivered to all internal and external stakeholders. In this way, building a brand that has characteristics favoured by consumers can be considered a viable way of branding for SME's who cannot afford massive spending on advertisement.

Furthermore, given the inflow of foreign competition into the Chinese market and the erosion of low cost as a comparative advantage for Chinese companies, companies are forced to innovate constantly to differentiate their offerings in the market place (Roll, 2008). Moreover, given the empowerment of customers, companies are on a constant lookout for strategies that could help them ensure customer loyalty. For these and many other strategic reasons, branding has become a necessity for Chinese companies. Some of the more important strategic reasons for branding are discussed below.

1.6 THE CHALLENGES OF SMEs BRANDING IN CHINA

In recent years, some Chinese companies (mostly state-owned enterprises) strategically moved their visions from a product-orientated company to brand-oriented company (Liu, 2007, Yang et al., 2009, He, 2012). In 2004, Lenovo, the first computer manufacturer in China, took over the IBM PC division for 1.75 billion dollars (Sumner, 2005). In January 2005, as Watson of Hong Kong bought Marionnaud, a large distributor of French cosmetics and perfumes have settled locally (Caprice, 2007). Despite the increasing focus of some Chinese companies on the developing and maintaining of brand equity, the majorities of Chinese firms are still facing the branding problem.

From the perspective of entrepreneurs, the trading mindset had been a key factor that limits the brand creation of the Chinese companies. China has long been under the dominant trading mindset, where business have been overly concerned with transaction, sales and turnovers (Kshetri, 2007). This meant that companies usually focused on building tangible assets like factories, assembly plants, R&D labs and so on. This also suggested that the focus of the company was more on immediate tangible gains rather than long term intangible gains. All these factors have combined in making marketing and branding not so important for Chinese businesses. This mindset has not allowed the companies to make any substantial investments in brand building, neither strategically or financially. With the low cost that Chinese companies were exploiting till very recently, it seemed that branding was not so important because branding is a long term organization wide exercise that may not yield tangible and immediate benefits (Roll, 2008). Further, top class brand management practices demand substantial allocation of managerial, financial and human resources over fairly long periods of time. This route directly contradicts the traditional mindset of Chinese businessmen (Kshetri, 2007, Wu & Wu, 2008, Yang & Li, 2008). But as the Chinese economy is evolving and as more and more global companies are making their marks in such diverse industries as consumer electronics, fashion, fast food, and even cosmetics. Chinese companies are gradually realizing the importance of having a strategic outlook and investing in building brands rather than factories. But this is just a beginning and this dominant mindset which has dictated business practices for centuries cannot be easily overlooked and it will indeed be an arduous task for Chinese companies to evolve with the times and adapt brand management practices.

Innovation and creativity are very important elements of any product development. Some of the biggest brands in the world such as SONY, Apple and Samsung have built their sprawling

empires based on constant innovation and creativity. Although innovation is difficult to measure, R&D spending as a ratio of gross domestic product (GDP) can be an indication. On a national level, Asian economies used to lag behind the rest of the world on R&D spending as a ratio of GDP from 1987 to 1997, with the exception of Japan and South Korea. However this trend has changed dramatically in the last decade. In 2011, the combination of East/Southeast and South Asia (including China, Taiwan, Japan, India, South Korea) accounted for 34% (\$492 billion) of worldwide R&D. In the meantime, China continues to exhibit the world's dramatic R&D growth pattern since 2007 and the pace of growth over the past 10 years in China's overall R&D remains exceptionally high at 20.7% annually (U.N.E.S.C.O., 2013). For Chinese companies to reach the next level of building really resonating brands, one of the first steps is to develop a mindset of creating something novel rather than adopting ideas from the western world to local customers.

The implications of IP protection in Asia have been a major barrier against building brands. In their own backyards, many Asian companies have faced rampant counterfeiting and infringement of IP rights (Maskus, 2000). Until and unless legislation and law enforcement get better in the region, it may be a hurdle that prevents a deeper appreciation and respect for intangible asset management in the Asian boardroom. The World Customs Organization estimates that 5-7 percent of global merchandise trade, amounting to US\$450 billion, is due to counterfeits (I.C.C., 1997, OECD, 2009). China alone is estimated to be contributing almost two-thirds of all the fake and pirated goods worldwide (OECD, 2009). In 2004, for example, French luxury house LVMH spent more than US\$16 million on investigations and legal fees against counterfeiting (OECD, 2009). This counterfeit market has indeed become one of the most pressing challenges for China's quest to build a strong country brand at a

holistic level and for the individual companies that have to combat this problem on a daily level.

Till very recently, most of the Chinese companies were protected and financially supported by the government (Chunyun, 2003, Atherton & Smallbone, 2010). As not many sectors were open to foreign competition, Chinese companies did not face any sort of urgency to improve their productivity and enhance their competitive advantage. Most of the companies had favourable access to resources which offered them a greater advantage than the non-Chinese companies. But with the opening up of the Chinese economy, market conditions gradually changed. Even though the favourable treatment continues to a certain extent, most of the industry sectors have become highly competitive. Chinese companies were forced to improve their productivity and build sustainable competitive advantage that would allow them to survive and thrive in the competitive market (Williamson & Zeng, 2004). This sudden shift in the market structure and the business conditions pose a huge challenge to Chinese companies. To adjust to the changing competitive spectrum and also to update business practices and culture simultaneously would be a long drawn process.

To summarise, the changing market conditions have morphed branding from being a luxury for an elite few to a strategic necessity to all businesses that wish to survive and thrive in the long run. Chinese SMEs have for long survived under government protection without having to build strong brands. But with the rising economic power of China in the global scene, the confidence levels of many Chinese companies are growing and more companies are aspiring to venture into the global market. For these companies, the key to success is in building brands that resonate with customers and that allow them all the advantages discussed earlier in this chapter. Though the Chinese mindset did not realise the importance of branding for a

long time, the changing times is forcing them to realise the critical importance of branding in allowing their companies to successfully compete in the global markets.

1.7 THE CURRENT SITUATIONS OF CHINA'S BRANDS

Currently, a large number of local Chinese brands are suffering from the “copycat” issue (Bian & Veloutsou, 2007, En-sheng, 2009, Greene, 2008, Hennessey, 2012, Xia & Yao, 2012). This copy phenomenon nowadays in China has spread to every business branch, not only product copying but, for example, the copy of an entire apple store in Shanghai (Hunter Jr & Puliti, 2012). There were even entire villages in Shenzhen devoted exclusively to copy and reproduce paintings from the best artists such as Monet, Van Gogh. The copying even reached food: increasing numbers of fake eggs, fake rice and fake duck were found in the China's grocery market and the term “fake” does not refer to wax copies for display but real food to be sold and ate (Hanser, 2004, Lee, 2005, Ross, 2012). In some regional cities in China, the local government even created a word “sponsored copycat brand” (Oliver, 2013). The copycats are also easily found in trademarks: there are clothing brands like, Lare Boss, Peier Caillar or even Yang Peng Armani. Some of the copycats now even carry some registered trademark symbol in their design. Intriguingly, the copycats are something of a brand themselves in China. They are collectively known as “Shanzhai” (Leng & Zhang, 2011). Historically, “Shanzhai” refers to a mountain stronghold and was used as a metaphor to describe bandits who evaded corrupt authorities to perform deeds they saw as justified. Today, the word refers to manufacturers who copy existing products and seek to evade taxes and legislation (Tse et al., 2009).

In western markets, copycat brands normally face legal issues and public condemnations. However, in China, consumers may respond to certain copycat brands in a different way. A common understanding is that many Chinese consumers may feel a sense of pride when they see a cheap copy of a western brand (Lung-Kee, 2002). They believe it reflects well on the ingenuity and resourcefulness of the Chinese people. Purchasing some copycat brand that looks like the real brand but with more features and at half the price sounds like a good deal to consumers in China. Under this mindset, the “Shanzhai” are respected more than they are reviled. A number of Chinese SMEs are very clever at mimicking more successful brands, they know they do not need to actually copy an actual product in order to benefit at the expense of other famous brands. Most of the time, all they need to do is leveraging their brand equity by mimicking the famous brands. It is interesting because this is an issue that many Chinese companies (especially SMEs) seeking to build their unique brand equity are struggling to deal with (Luo et al., 2011). Without an initial familiarity with the brand and what it stands for most, consumers may look askance at the unfamiliar brands. Even when the products appear to provide them the features that they need, they will be concerned about the product quality and reliability. Although with the increasing product quality for Chinese products, this is now a much less of a concern, in the absence of brand name recognition, the products must find ways to communicate with customers and speak for themselves.

In the Chinese culture, it appears that copying has never been either illegal or frowned upon or seen as a lack of talent. In fact, the way to learn historically is by repetition, the exact reproduction of the master’s work and teachings (Elman, 1991). This is because copying (or trying to get as close as possible to the master’s work) was, and still is, considered the best way to learn, the acceptable method of study, overall in art and crafts world, where it is more easy to do so, but also in the business world, where knowing and reproducing the acts and

steps of the successful ones is something considered normal (Kennedy, 2002). In the mind of traditional Chinese, copying the best means they are as good as the best and if a company can produce bag as LV, they are just as good as LV. The culture influence on the behaviour of Chinese people is significant (Cai & Shannon, 2012, Elman, 1991, Shek, 2004, WangDoss et al., 2010). The best example would be calligraphy. Traditionally, the study of calligraphy was (and still is) based on copying master pieces from reputed calligraphers, thus learning them by copying strictly, continuously, until the move of the hand becomes instinctive, routinely, and the copy perfect. Any deviation or personal deformations from the model were seen as a failure of the student, and so, dismissed. The entrepreneurs were educated in such a teaching system which remains the same as it is now: creativity is not welcomed, and “copy and reproduce” is the proper way to pass all the tests, especially the National University Examination (also known as GaoKao). So when they finish all their studies, it is not unusual this mindset gets stuck and makes them lose their creativity and talent in doing business in the real world. There are also some economic reasons. For example, by copying actual brands, they skimp on R&D costs, and sell the product to a population which cannot really differentiate between a BlackBerry and a BlockBerry, as it looks the same, thus concerning a big part of the huge Chinese Market.

From the perspective of business operation, there are examples of Chinese SMEs mimicking successful brands and managing to stand out in the ultra-competitive market. QIAODAN is a sportswear maker based in south eastern China. The family-controlled company with sales of RMB 2.9 billion last year has become one of the country’s top 10 domestic sports apparel companies by revenue and number of outlets, despite its relatively short 11-year history (Zhang, 2012). Starting in the 1980s as the name of a general supply factory, the owner reinvented the brand name as Qiaodan, the Chinese name given to Michael Jordan, the

legendary US basketball star who has a massive fan base in the country- despite the fact that Qiaodan is also the name used in China by Nike for its range of “Air Jordan” shoes and apparel. In developed markets, using a logo similar to somebody else’s registered one is enough to get the brand into deep trouble, but clearly, this was not the case in mainland China. Another similar example relates to Chinese Lifestyle Food & Beverages, a company which sells snacks under the “Crayon Shin-Chan” brand, raising just under US \$100m in an initial public offering in Hong Kong (Yvonne, 2011). Crayon Shin-Chan is a well-known Japanese cartoon character which became popular in China during the 1990s when it was dubbed and shown on television. Chinese Lifestyle F& B acknowledges that it has not received permission from the Japanese publishing house that owns the character to make money from it but stated confidently in its prospectus that it didn’t expect to get into trouble. Official “Crayon Shin-Chan” products endorsed by the Japanese publishing house display the Chinese characters “Labixiaoxin” horizontally, whereas the Chinese snack maker displayed the characters vertically (Yvonne, 2011). Although both Qiaodan and Chinese Lifestyle F & B are successful examples of China’s SME standing out in the ultra-competitive market, they raised two main issues. Firstly, the copyright in one of the world’s most important consumer market is still murky. Second, stealing, copying and mimicking are still the main strategy for China’s SME to survive and grow, even for successful ones.

To sum up, unknown brands have enjoyed market expansion in the world market for the past few decades. A number of consumers appear to accept unknown brands as an alternative to national brands. Indeed, unknown brands have received more attention and credit as some consumers feel they are equal to the quality of known brands, but often without the higher retail price (Robert et al., 2010). China is currently moving into a market-driven economy with an emerging middle class. Yet the literature reports little on the beliefs and perceptions

of unknown brands versus known brands in China. How should China's firm embrace marketing, especially the branding of unknown brands, have not yet been fully studied. This research contributes to the international marketing and brand development by demonstrating that consumers rely on unique product attributes when determining product quality of unknown brands and based on this, make purchase decisions.

From the perspective of practical business practice, in order to survive in the ultra-competitive market, more Chinese companies are seeking ways to increase their brand awareness in order to make their brands "known" by consumers. However, given their limited financial resources, massive advertising appears to be unrealistic. Besides, due to the entrepreneurs' inability to innovate, strategic myopia often occurs in the process of strategic branding and this subsequently leads to the current copycats phenomenon in China's market. The traditional Chinese culture and current socialism idea intrinsically influence Chinese consumers and they appear to respond to brands in a way that is different from Western consumers. Finding a "right way out" in the sophisticated China's market is the priority for China's SMEs as well as the brands they manage. Yet to date, the pioneering work on consumer behaviour offers little guidance on what antecedent factors affecting consumers unknown brands' shopping, not to mention in the context of China- the biggest consumer market in the world. From a managerial perspective, understanding factors affecting consumers' perception towards unknown brands and consumers' intention to purchase unknown brands are essential in achieving superior value for the marketers and retailers. This is because, when viewed through a managerial lens, understanding what drives consumers attitudes and purchase intentions of unknown brands provides managers with guidance to reducing and managing the unnecessary costs and unproductive effort made on ineffective marketing, and thus maintaining better profitability for the firm as well as the brand. As such, a comprehensive set of antecedent variables of consumers' quality perception and purchase

intention associated with unknown brand purchasing need to be investigated from the consumer standpoint, to better understand consumers' perception of unknown brands and further assist marketers effectively allocate their resources to achieve optimum marketing strategies. Furthermore, while the phenomenal rise of unknown brands in developing countries is well documented, the academic literature investigating consumer behaviour in these countries is relatively underdeveloped and dominated by western perspectives utilizing samples based on mature western markets, such as U.S. (Field et al., 2012) and Europe (Norberg et al., 2011), yielding findings that would otherwise not be generalizable in the context of emerging economies such as China, in which the business environment for unknown brands shopping may be constrained by different set of cultural factors (Hofstede, 1980). Since there is limited understanding on consumers unknown brands purchasing in China, more insightful investigation is imperative in explaining consumers perceptions towards unknown brands and how perceptions eventually drives the purchase behaviour. Therefore, the research question in this thesis is mainly around what are the factors that drive consumers positive perceptions towards unknown brands and subsequently influence consumers' intention to purchase unknown brands.

In order to address our research purpose, the rest of study is organised as follows. In Chapter two, relevant literature and theories were reviewed. By integrating the distinct features of unknown brands as regards to the famous brands, theories are synthesised and hypotheses were developed. Then, in Chapter three, based on the nature and structure of the hypothesis, appropriate research methods were implemented to address the research question. Chapter four provides data analysis and discussion of the results. Finally, the contribution and limitation of this study are summarised in Chapter 5 and the directions of future research were identified.

CHAPTER 2: LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 CHAPTER OVERVIEW

The purpose of this chapter is to review relevant published literature related to consumer behavioural intention, especially those areas that are able to shed light on the research of unknown brands. Primarily, this chapter is structured around three sections. In the first section, the fundamental theories pertaining to consumers' behavioural intention of unknown brands purchase is reviewed. It provides the major rationales for integrating and applying theories to explain the drivers of consumers purchasing of unknown brands. In the second section, the major antecedents affecting consumers' purchase behaviour of unknown brands are presented. Despite numerous studies of antecedents of consumer behavioural intention, the topic was never discussed in the context of unknown brands purchase and the specific factors influencing consumers unknown brands purchase remains unexplored. The second section will review the relevant and propose hypotheses based on the specific context of unknown brands shopping. The last section discusses consumers' decision making process of unknown brands shopping by extending S-O-R theory to the context of this study. The theory is reviewed in detail and the rationale and implications of extending S-O-R theory to the context of unknown brands purchase is also discussed.

2.2 THEORETICAL FOUNDATIONS FOR CONSUMERS BEHAVIOURAL INTENTION OF UNKNOWN BRANDS PURCHASE

2.2.1 Introduction

Although the topic of branding has been well-studied in the past 20 years, the attention on unknown brands remains frustratingly scant. Understanding how consumers respond to unknown brands and the flow of consumer decision making are critical for the branding of unknown brands. Within the literature, the process of consumers decision making is believed to be very complicated involving a number of different constructs which also vary in different shopping contexts. In order to understand consumers' decision making of unknown brands, several perspectives within consumer behaviour literature are considered in this study.

2.2.2 Major Perspectives of Consumer Purchase Decision Making

Several studies consider consumers shopping decision making as “value driven” behaviour (Levy, 1999, Zeithaml, 1988) driven by the consumers' perceptions of value. A number of studies have highlighted the importance of value in consumers purchase decision making of products and services under different shopping contexts (Baker et al., 2002, Chen & Chen, 2010, Chen & Chang, 2012, Grant et al., 2010, Kwon et al., 2007, Li et al., 2012, Wang, 2010). Accordingly, the perceived value is then defined as an overall rational assessment of the utility of the products or services based on the perception of relevant benefits and sacrifices (Boksberger & Melsen, 2011, Zeithaml, 1988). Other studies have explored the critical role of involvement in interpreting how cognitive information is processed in consumers' minds and engage in extensive evaluations of product attributes and features (Espejel et al., 2009, Hu, 2011, Lee et al., 2011). This stream of research classified

consumers as either low-involved or high-involved based on the complexity of decision making process. For low-involved consumers, decision making uses simple rules to form attitudinal judgements. The early stage of cue utilisation theory (Steenkamp, 1989, Richardson et al., 1994) implies that the low-involved consumers may evaluate the overall performance of a product simply based on one or more indicators such as price, package, warranty, store layout, etc. For high-involved consumers, the behaviour can be explained from the perspective of information processing framework (Ostergaard & Jantzen, 2000, Blackwell et al., 2001). The framework argues that consumers develop beliefs and attitudes towards the shopping environment based on an ongoing process that is generated by the interaction between consumers and environmental stimuli. The information processing framework pre-assumes that consumers tend to seek an equilibrium in which there is a balance between the consumers' cognition and affection and the actual environment in order to avoid cognitive dissonance (Ostergaard & Jantzen, 2000). On the other hand, in contrast to the information processing framework, several studies proposed that consumers affective responses should be considered as a result of cognition and is rather a specific stage in the process of consumers decision making (Holbrook & Hirschman, 1982, Holbrook & Batra, 1987, Bagozzi et al., 1999). In particular, the researchers argue that consumers normally go through several stages, such as appraisal (cognition), emotional reaction (affect) and coping responses (conation) in their purchase decision making process. More specifically, the studies challenged major consumer behaviour theories such as theory of reasoned action and theory of planned behaviour by arguing that attitudes and subjective norms are not sufficient determinants of intentions and that intentions are not a sufficient impetus for action. The studies dictate that the evaluation of internal or situational conditions as they apply to one's wellbeing, lead to specific emotions and in turn stimulate coping responses of intention directed towards specific actions (behaviour). Therefore, the primary purpose of consumers is

not to evaluate the relations between attitudes, beliefs and the environment but to fulfil a desire and to obtain pleasure in life.

The various perspectives of consumer decision making process differ from each other on several important dimensions. First of all, the “value-driven” perspective emphasises situations in which consumers make evaluations of performance based on perceptions of trade-off on the basis of relevant benefits and sacrifices. For example, a consumer buying food products from supermarket based on the ratio of the price (sacrifices) versus quality (benefits). However, such conceptualisation of trade-off can be problematic sometimes as quality may be difficult to judge and the evaluation of trade-off may involve uncertainties due to lack of sufficient product information. In other words, consumers may not always have a clear picture in mind in regards to the quality of the product that is offered in a supermarket. Accordingly, it is believed that a “value-driven” perspective is not able to explicitly deal with situations that were caused by the problem of uncertainty and therefore cannot provide guidance to consumers on how they can reduce the risk that follows from not knowing about the outcome or negative consequences of carrying out a certain decision (Hansen, 2005). On the other hand, cue utilisation theory suggests that consumers may try to reduce risks by using and evaluating available cues of products such as price, brand name, advertising, colour and etc. as indicators of quality of a product or service. Therefore, consumers may rely on one or more cues for the assessment of product performances as one risk-reduction strategy. Cue utilisation theory argues that consumers may resolve the uncertainty issue as mentioned in the “value-driven” perspective by making trade-offs between various available cues. The benefits of the purchase are subsequently evaluated based on the evaluation of product cues. Cue utilisation theory also proposes that cues mostly serve as heuristics in assessing product quality among other factors when there is a need to reduce the perceived risk of purchase and

when consumers' involvement is low. The theory can also be extended to explain the behaviour of high-involved consumers from the perspective of information processing framework.

From the information processing perspective, cues can be regarded as “pieces of information” while a product can be conceived as an array of cues. When consumers are highly involved in the decision making, they can be expected to engage in a more extensive internal and external information search for the purpose of reducing the risk of making a “wrong” choice. Thus, such a consumer will have a high degree of cognitive activity and will make strong efforts in conducting evaluations and comparisons of products before reaching a reasoned decision. The information processing framework also regards perceived quality as a less abstract concept than attitude (Grunert, 1996). Hence, perceived quality should be expected to precede attitude formation which in turn should be expected to precede buying intention in the consumer decision-making process (Hansen, 2005).

From an emotional perspective, although consumers do not make compensatory or non-compensatory types of cognitive evaluations when considering purchasing a product, cues still play significant roles in the appraisal process as antecedents of affective responses which could result in conation (intention) and subsequently lead to action (Bagozzi et al., 1999).

Although it seems that various perspectives on consumer decision making differ on the dimensions such as risk-reduction, the degree of cognitive and affective strategy and the construction of trade-offs and valuations, the perspective and the theories are also complementary. In fact, studies have found that consumers often use combinations of decision-making strategies under different purchase settings (Bettman et al., 1998). A

consumer may banish a product from his evoke set because he believes the “made in” label of the product reflects its inferior quality. Or a consumer simply may like a product because it elicits positive emotions when the consumer looks at it (emotional perspective). Such a positive emotion may affect the consumers’ purchase behavioural intention directly which could subsequently lead to purchase action (Kotler, 1974, Babin & Darden, 1996). Another consumer might assess trade-offs from a value perspective for a number of product alternatives and then use these trade-offs as input to a product comparison procedure (information processing perspective). Regardless of which perspective on consumer decision making is adopted, it is obvious that cue utilization plays a critical role across all the various decision making processes. The consumers rely on cue utilization to determine the perceived quality of product and reduce the uncertainty of valuation. The cues are interpreted as pieces of information in the information process perspective. The emotion is driven by cognitive evaluation which is also based on the evaluation of cues and environmental stimuli. Therefore, cue utilisation theory is considered as a very important theoretical foundation for the exploration of consumer decision making process of unknown brands.

However, cue utilisation theory alone is not able to explain the whole underlying process of consumers unknown brands purchase decision making. The effect of cues on the evaluation of perceived quality and behavioural intention differ when purchase environment changes (Hansen, 2005). Furthermore, the traditional cue utilization studies failed to reveal explicitly how behavioural intention is driven by consumers’ evaluation of different cues. Furthermore, various other factors such as consumers’ demographics (Bakewell & Mitchell, 2003, Simonson & Sela, 2011) and product knowledge (Veale, 2008, Raquel et al., 2009) may also play an important role in the process of consumer decision making. Therefore, it is argued that single cue utilization perspective does not offer the “correct” theory of consumer

decision making under the context of unknown brands shopping, but consumer research may benefit from an integration of multiple perspectives. Following such considerations, the thesis proposes a conceptual framework for understanding and integrating aspects of various perspectives on consumers' decision making of unknown brand purchasing. Based on this purpose, this chapter will review relevant consumer decision making theories in regards to unknown brands, and then propose an integrated model explaining consumers purchase decision making of unknown brands driven by cognitions and affections.

2.2.3 Signaling Theory

Signaling theory pertains to a number of theoretical works investigating communications between individuals or organizations where information is conveyed by transmitting the visible, audible or other detectable signals or cues (Spence, 1973). The theory is particular useful in explaining behaviours when two individuals or organizations have access to different amounts of information. Typically, the party who sends out information must decide the issue of whether or how to communicate their side of information through a signal while the party who receives information must decide how to interpret this signal.

The profundity of the theory lies in ascribing cost to information acquisition processes that resolve information asymmetries in a wide range of economic and social phenomena. The sagacity of the theory dwells in attributing cost to the processes of information acquisition that resolves the asymmetries of information in a wide range of economic and social phenomena (Connelly et al., 2011). Accordingly, signaling theory is widely used in the field of science from biology, sociology to economics and finance (Benartzi et al., 1997, Robbins & Schatzberg, 1986).

As a result, signaling theory also possesses a distinguishable position in a wide range of management literatures (Certo, 2003, Turban & Greening, 1997), including marketing, consumer behaviour, strategic management, organizational behaviour, human resource management and entrepreneurship (Boulding & Kirmani, 1993, Kirmani, 1997, Kirmani & Rao, 2000) as a framework for understanding how two parties (e.g., buyer and seller) address limited or hidden information in precontractual (prepurchase) contexts.

Although the implementation of signaling theory has gained significant attention recently, it has been applied mainly to resolve the concerns of organizations instead of being explored at the level of individual consumers. The review of signaling theory will provide a concise synthesis of the theory and its key concepts and findings, review its extensive use in the management literature and extend the theory into the context of unknown brands purchase.

The applications of signaling theory

The earlier applications of signaling theory in economics and management goes back to the 1970s when it was initially utilised to explain higher education's signaling function in the labour market (Spence, 1973). It was identified that employers were lacking of information to differentiate quality job applicants from the bad ones. In other words, an employer did not know enough about the ability of the candidates compared to how much the candidates know themselves. The quality candidates, therefore, obtained higher education as means to signal their high quality and communicate with employers to resolve the asymmetry of information. Such a signal was considered by the employers as reliable since lower quality applicants were not able to survive the rigors of higher education and would not be able to obtain a degree. In contrast to human capital theory which emphasizing the role of education for increasing

workers' productivity, signaling theory took a unique view by focusing on education as ways of communicating those desirable characteristics of the candidates that were hard to observe otherwise (Weiss, 1995). The signaling function was further illustrated by many subsequent studies. Kirmani and Rao (2000) explained the basic signaling model vividly by using a general example regarding high quality and low quality firms. In their example, both firms know very well about their true quality and performance but the investors and customers do not, therefore, an asymmetry of information exists between the insiders and outsiders. As such, both firms have the opportunity to signal or conceal their true quality to the investors and customers. If high quality firms receive payoff A when they signal and payoff B when they don't, low quality firms receive payoff C when they signal and payoff D when they don't, signaling represents higher payoffs and appears to be a viable strategy when A is greater than B and D is greater than C. Under such circumstances, high quality firms are motivated to signal their true quality but low quality firms are not, which results in a separate equilibrium. In such a situation, the investors and customers are able to distinguish the high and low quality firms easily and accurately. In contrast, when both firms benefit from signaling, then a pooling equilibrium presents and consumers will not be able to distinguish between the high and low quality firms (Cadsby et al., 1990).

Signaling theory is also applied in the areas of marketing and consumer behaviour to explain how product quality is assessed by consumers when asymmetry of information presents (Kirmani & Rao, 2000). Rao et al. (1999) define signals as "cues" that can be used to deliver credible information about the otherwise unobserved quality of products to the buyers. Therefore, signaling theory focuses on resolving the problems of information communication at the precontractual stage and therefore is very useful for studying consumers' initial purchase intention of products. Signaling process is only functional under the condition that

1) information asymmetry presents at the pre-contractual stage and 2) the source of signal has high credibility. In other words, if the consumers do not trust the source where signals come from, it is unlikely that the signal will convey positive information to consumers and persuade them to have positive evaluations of the quality of the products. Compared to broader theories such as agency theory, signaling theory only address pre-contractual information problems (Bergen et al., 1992) and is more specific about qualifying conditions. Compared to the more narrow theories such as source credibility theory, signaling theory explains the nature of the signals and the information asymmetries.

Within the literature of signaling theory, research has revealed two important features of the signals. First of all, signals are considered mostly extrinsic to the product. Second, the extrinsic signals have higher confidence value to outsiders which means they are more confidently utilised and assessed by consumers for the evaluations of otherwise unobserved product/service qualities. Extrinsic signals come from extrinsic cues which refer to the product-related attributes that are not inherent to the product being evaluated, such that changes to these attributes do not alter the fundamental nature of the product. Intrinsic cues, on the other hand, refer to product attributes that are inherent to the product and changing of such will alter the fundamental nature of the product (Richardson et al., 1994). For example, the price of a television is considered as an extrinsic cue as changing the price does not change the fundamental nature of the television while the internal components of the television are considered as intrinsic cues because altering the internal components will change the function and performance of the product. While consumers do utilise both intrinsic and extrinsic cues as signals to evaluate the quality of the product, there are many situations where extrinsic signals may be more influential than intrinsic signals. Previous studies suggest that consumers rely more on extrinsic signals to evaluate product quality

when 1) extrinsic signals are more readily available to consumers compared to intrinsic signals; 2) extrinsic signals are more commonly accepted and are more easily understood (Dawar & Parker, 1994, Zeithaml, 1988); 3) consumers have limited time to make decision to purchase (Zeithaml, 1988); and 4) consumers have a lower need for cognition and are less apt to engage in elaborative thinking (Chatterjee et al., 2002).

Furthermore, consumers make judgments of the cues as signals not only based on the confidence value of the cues, but also the predictive value. Predictive value refers to how much the consumers are able to associate a given cue with the quality of the product (Richardson et al., 1994). The internal electronic components of television might be very useful in determining the quality of the television but it is too hard for consumers to understand therefore consumers with less knowledge of electronics will not be able to confidently assess such intrinsic attributes accurately. Consumers normally assign more confidence value to extrinsic cues such as price and brand compared to intrinsic cues because extrinsic cues are more easily recognised, understood and processed (Richardson et al., 1994). The empirical results support the assumption by demonstrating consumers rely more on the extrinsic cues as signals for quality judgment due to their inability to understand and evaluate intrinsic product attributes (Rao & Monroe, 1989). In summary, as the intrinsic cues are not always readily available for consumers and are mostly hard to observe and understand, consumers' lack of confidence of using intrinsic cues as signals, therefore they tend to rely on extrinsic cues to make purchase decisions in most situations. The extrinsic cues are studied extensively within the literature as signals include brand name (Erdem & Swait, 1998, Agrawal et al., 2011, Otim & Grover, 2010), retailer image (Chu & Chu, 1994, Ailawadi & Keller, 2004), price (Dawar & Parker, 1994), warranties (Boulding & Kirmani, 1993), and store environment (Baker et al., 1994, Bloom & Reve, 1990). A comprehensive

review of product attributes used as signals to study consumer behaviour is listed in Table 2.1.

Table 2.1. Review of Empirical Signaling Research on Consumer Behaviour			
Authors	Signal	Other factors	Dependent Measure(s)
Akdeniz, Calantone & Voorhees (2013)	Brand reputation Warranty Price Third party ratings	Interaction	Perceived quality
Fang, Gammoh & Voss (2013)	Brand alliance Warranty	Joint effect	Product quality Brand evaluation
Hsiao-Chien (2013)	advertising	Consumer awareness	Perceived quality Willingness to pay
Hartmann & Apaolaza (2012)	Warm glow Self-expressive benefits Nature experiences	Green energy brands	Brand attitudes Purchase intentions
Back, Kim & Yu (2010)	Brand credibility Brand prestige	Multiple category	Brand purchase intention
Koubaa (2008)	Country of origin Country of production	Multidimensional	Brand perception Brand image structure
Fruchter (2005)	Level of price Level of advertising	Extended Signaling model	Perceived quality
Barone, Taylor & Urbany (2005)	Advertisement	Brand differentiation Product category	Perceived quality
Tsui (2012)	Advertising	Quality	Willingness to pay
Sultan (2012)	Warranty Price	Signaling consistency Unexpectedness	Product quality
Swain, Cudmore & Weathers (2012)	Label information	Manufacturer responsibility	Product safety perception
Raquel, Monica & Margarita (2009)	Brand Origin Price	Consumer knowledge	Product choices
Taylor (2009)	Brand name Price	Interaction	Perceived quality

Asymmetries of Information

Signaling theory focuses on resolving the issue of information asymmetry. The decision making processes of individuals, private and public organizations are affected by various available information. The information that individuals rely on for making decisions could be public information which is freely available to the public, or private information which is only available to specific small group of the public. The asymmetries of information will occur when different parties possess different information or put simply, different people know different things (Stiglitz, 2002). Because some information is private, those who possess that information can choose to withhold the information from other parties and therefore they could potentially make better decisions than those who don't have access to the information. For more than a hundred years, classical economic theories were developed solely on the assumption that information was perfect between parties while such asymmetries of information were largely ignored (Stiglitz, 2002). In order to address this major drawback in the classical economic theories, much research has been devoted to understanding how people's and organization's decision making processes are affected by the imperfect information in the market place (Hadar & Fox, 2009).

Previous research has highlighted that the asymmetry of information is particularly important to decision makers in two situations: when the information is about quality or the information is about intent (Stiglitz, 2000). In the former case, the information asymmetry becomes important when the buying party is not fully aware of the characteristics of the selling party. In the context of consumer behaviour, this normally indicates that consumers are not fully aware of the quality of the producer and the characteristics of the products that were produced by the producer. In the latter case, information asymmetry also becomes important when one party is concerned with the behaviour or behavioural intentions of the other parties

(Elitzur & Gavious, 2003).

Much of the research on information asymmetry about behaviour and intentions of the other party examines the use of incentives as mechanisms for reducing potential moral hazard that results from an individual's behaviour (Jensen & Meckling, 1976, Devers et al., 2007, Ross, 1973). Drawing on previous literature, this study identifies the importance of studying the role of product attribute-related information due to several reasons. First of all, the product attribute information can indicate the quality of the product and the quality of the producer, especially in the context when only limited information is available to consumers for making purchase decisions, which is also particularly the case in the unknown brands purchasing setting. Secondly, the product attribute information (such as price, package, warranty, name) is decided and manipulated by producers (and consumers know this), therefore, consumers may believe that the information contained in the products can reflect the intention of the producers. For example, if the package of one brand which has an unfamiliar brand name to customers looks too similar to that a national brand of the same kind, the consumers may believe that the producer of the unknown brands may intend to confuse consumers in buying their copycats. Therefore, the consumers' concern about the intention of producers may be negative and this may, in turn, affect their quality judgments on the products. Therefore, understanding how marketers should resolve information asymmetries by manipulating product information cues to communicate effectively with consumers about unobserved product quality is critical to the survival of businesses. Furthermore, under the condition of "information asymmetry", not all product attributes are observable. Attributes, such as durability, reliability and other quality features are often unobservable prior to purchase and consumption of the products. However, such unobservable features may be "inferred" from presented information signals that are observable (Huber & McCann, 1982) such as price,

package, etc. Based on signaling theory, a higher price signal may convey quality information such as “higher durability, higher reliability” while low price signal may send the opposite information to consumers.

Within the literature of consumer behaviour, the information asymmetry can be further divided into prepurchase information scarcity and post purchase information clarity based on the different stage of the purchase process (Kirmani & Rao, 2000). The information scarcity in the pre-purchase stage refers to the situation where consumers do not have access to the information of the products’ quality prior to purchase and therefore are unable to evaluate the product quality before the actual purchase happens. Post-purchase information clarity refers to the situation where consumers are able to experience and evaluate the quality of the product after purchase or use. The level of information asymmetry can be categorised based on the nature of the goods. The literature on information economics has highlighted three major categories of goods: search goods, experience goods and credence goods (Darby & Karni, 1973, Nelson, 1970) which has distinguished the levels of information asymmetry. Search goods refer to products or services with most features that are easily evaluated before purchase (such as a mobile recharge voucher) (Darby & Karni, 1973). Based on the conceptualization of search goods, products with such features normally possess high levels of both pre-purchase and post-purchase clarity and therefore the quality uncertainty is low to consumers which indicate the product does not require comprehensive physical examination before purchase. In contrast to search goods, experience goods refer to the products containing characteristics that are difficult to observe in advance, however these characteristics can be ascertained upon consumption. Therefore, the theory suggests that the experience goods possess high levels of prepurchase information scarcity and require immediate evaluation to ascertain quality upon consumption (Nelson, 1970). After the clarity

process in the post-purchase stage, consumers are able to determine whether or not they have purchased a high-quality product. Credence goods refer to a good or services whose utility impact is difficult for consumer to ascertain either at the prepurchase stage or the post-purchase stage, due to consumers' lack of specialised knowledge (Darby & Karni, 1973). Consumers experience high levels of pre-purchase information scarcity and are unable to conduct information clarity at the post purchase stage; therefore credence goods represent the highest level of information asymmetry in the market place.

The level of prepurchase information scarcity and post-purchase information clarity determines the qualifying conditions for the implementation of signaling theory. While intrinsic product attributes are unavailable to consumers, the need for extrinsic signals is desired to determine the quality of the product. The ability to evaluate product attributes after purchase enables consumers to determine whether or not the signals conveyed accurate product quality. Therefore, the signaling theory is highly applicable to experience goods which are often characterised by the combination of high prepurchase scarcity and high post-purchase information clarity rather than on search or credence goods which do not have such features.

Signaling credibility

The first adoption of signaling theory on consumer behaviour was the analysis of why people were hesitant to purchase or sell automobiles without a dealer as an agent (Akerlof, 1970). There are a variety of quality levels for the used cars in the market, some of which turn out to be "lemons" (Spence, 1973). The owners of the second hand cars have more information regarding the performance and quality of the car but the potential buyers do not. In this

situation, buyers also cannot trust the reports provided by the owners who have the motivation to lie in order to sell their “lemons” at a higher price. Therefore, the imperfect information between sellers and buyers has caused negative consequence in the market. The buyers have concerns about the quality of the cars and therefore offer a price for quality cars that is lower than the sellers’ expectation. After seeing this price, the seller of the “lemons” finds great incentives in concealing the flaws of their cars to sell their cars at more than their worth and at the same time, the owners of the real quality used cars are reluctant to sell their cars in such a market causing the average quality of cars in the market to fall. Overtime, the market is gradually occupied by “lemons” while the real quality cars are driven out (Akerlof, 1970). For the owners of real quality cars who try to make a sale, one viable way to address this issue, as suggested by (Spence, 1973), is that the seller looks for a reliable signal to convey his private information on the quality of the car to those who seek high quality cars in the market and have the intention to pay premium price for them.

Such signals could come in various forms, for instance, warranties. If the owner knows that their car is in good condition, they could offer a solid warranty to cover any potential cost of repair if the car mechanically failed in a certain period of time. In such cases, the owners of the inferior quality cars will find it too costly to imitate such a strategy and offer a similar warranty to their potential buyers therefore they may simply withdraw from the market and leave the opportunities to the owners of high quality cars. As a result, a warranty will become a credible signal to bring a premium price for the sellers in the market.

A signal is only considered credible when the senders are subject to both tangible (money and investment) and intangible loss (reputation and fame) if they choose to send a false, misleading signal and sell products with inferior quality (Boulding & Kirmani, 1993,

Ippolito, 1990). Just as previously discussed, warranty is a typical example of a credible signal. In the event that a seller sells low-quality product with a warranty, the seller will be liable for the cost of repair or replacement when the warranty claims are made by the buyers. On the other hand, a seller selling high-quality product does not need to worry about such cost because the number of warranty claims will be low. Signaling credibility is a key theoretical condition for a signal to be an effective mechanism for conveying high product quality. Signaling credibility is often described as bond credibility where bond refers to either the tangible and intangible asset that will be forfeited in the event that a false signal is sent by the sellers or it can be described as the form of insurance to the buyer that the seller will sell high quality products. High signal or bond credibility occurs where the seller is believed to have made significant investment by sending a high quality signal and that the investment will be at risk in the event that a false signal is sent. Accordingly, a false signal becomes very expensive for the “lemon” sellers to send. From the perspective of information economy (Boulding & Kirmani, 1993), such a distinction will create a separating equilibrium where only sellers of high quality products are able to afford to send credible signals conveying high quality, enabling buyers to distinguish between buyers who sell high quality or low quality products. Conversely, if the gains of sending a false signal outweigh the cost of doing so, then a pooling equilibrium will occur (Bergen et al., 1992).

In order for a separating equilibrium to occur, the potential loss of investment associated with false signals must be recognised and believed by consumers. Such loss could be either tangible (marketing expense, warranty claims, price reduction) or intangible (reputation, high-end brand image). For example, a fine dining restaurant may choose to charge a premium price for a gourmet meal therefore sending a high quality signal to customers. However, such a signal will only become credible if the customers know that the restaurant is

subject to loss of reputation, customer retention and word of mouth if the meal is not of great taste and high quality. Consumers may believe that a restaurant in a busy, downtown area, or a small community area may be penalised for selling poor quality meal because the business relies on repeat customers and word of mouth, but consumers are unlikely to believe that a roadside restaurant on a highway is too concerned with reputation and repeat customers and therefore their investment will be less vulnerable if a false signal is sent. For the latter case, a roadside restaurant near a highway may have low signal credibility and therefore customers will not assume the signal as an indication of high quality (Boulding & Kirmani, 1993). As such it is appropriate to use signaling theory to explain the situation in which the consumer feels that the vendor has invested substantially to send a high quality signal and that the risk of the investment increases if the signal is wrong

Signaling Outcomes

Signaling theory has been applied extensively across multiple disciplines to understand how a transaction or exchange can be completed by providing the necessary trade information through the transformation of the quality signals from the more knowledgeable party to the less-informed party.

The desired outcome in a signaling framework is for the signal to abridge the asymmetry of information, assuring the less-informed party in a transaction that they are producer or services of premium qualities (Bloom & Reve, 1990). The model of signaling theory ultimately aims to influence desired outcomes such as the perceived quality of the product or services, and behavioural intentions such as intention of purchase, or intention of hiring job candidates (Kirmani & Rao, 2000).

Within the literature of consumer behaviour, the majority of the studies focus on perceived quality of product or services as a key outcome with some research also dedicated to addressing the reduction of uncertainty (Moraga-González, 2000), the quality of brand or organization (Tsui, 2012) and the intention to purchase (Wells et al., 2011).

In spite of the fact that the perceived quality dimension is incorporated in most of the signaling models as the distinguishing characteristic, the understanding of quality can be interpreted in various ways. In some research, quality refers to the unobservable ability of individual, for example being signalled by completion of the educational requirements necessary for acquiring a degree (Spence, 1973). Some others believe quality as the unobservable ability of organizations to make profit and provide high investment return for shareholders in the future. In this study, quality refers to the underlying, unobservable characteristics of the products to fulfil the needs or demands of a potential buyer observing the signal. Table 2.1 has listed the qualifying conditions and attributes of the key constructs in signaling theory along with examples. In the following section, the signaling process will be reviewed in the form of a time line to reveal how information asymmetry is resolved through such a process.

Signaller, signal, receiver and feedback

Connelly et al. (2011) reviewed the relevant management literature regarding signaling theory and organised the key elements of signaling theory in the form of a time line (signaller- signal- receiver-feedback), that was the first time that signaling theory was systematically reviewed in regards to management literature. The previous discussion

highlighted the relationship between information asymmetry and signaling theory. In this section, a review of primary components of signaling theory is presented following the time line approach adopted by Connelly et al. (2011). The signaling timeline includes three primary actors: the signaller, receiver as well as the signal itself and each of these elements will be discussed under the context of management and consumer behaviour.

The literature regarding signaling theory refers to the signallers as the insiders who obtain private information about individuals, organizations or products that is not available to the outsiders (Spence, 1973, Kirmani & Rao, 2000, Connelly et al., 2011). Generally speaking, the insiders hold some information that could be positive or negative that the outsiders may find important and useful in making a decision. Such information could include various things such as the specific details or functional features of certain products or services, the early stage of R&D test results of an unlaunched product or preliminary sales results regarding product sales performance reported by the test market. In short, private information enables the insiders to gain a privileged perspective regarding the underlying quality of some aspects of the individual, products or organizations.

In the management literature, a signaller could refer to a person, product or an organization. Because the sellers and the buyers have partially competing interests in a transaction, the signallers who owns the “lemons”, therefore, has the “incentives” to cheat the receiver and provide misleading information that makes the receivers choose specific products with inferior quality (Johnstone & Grafen, 1993). Under such a context, the concept of signal honesty has become a very important dimension in the signaling process (Durcikova & Gray, 2009). Signaling honesty describes a scenario that the signaller actually owns the high quality that is consistent with the quality signals sent to the receivers.

Applying the definition of signaller in the context of consumer goods shopping, the signaller may mostly refer to producers, retailers or manufacturers, those who hold insider information on certain aspects of the product. The information could be both positive and negative in regards to the assessment of their product quality. The possession of this insider information makes producers have a clearer understanding of the underlying quality and value of the products they produce and supply. In other words, the signallers may understand clearly how much their products are worth but the consumers do not. This information also assists producers in having an advantageous position in the market and dishonest signallers may use this information to hide negative product information and charge buyers at a price more than their product actually worth.

The signal refers to the positive and negative information obtained by the insiders and communicated to the outsiders in order to resolve the gaps of information between two parties in a transaction. Signaling theory focuses primarily on the actions taken by individuals, products or organizations for the aim of deliberately communicating positive information that can reflect positive attributes of themselves. The intention of such signaling action dedicated to convey positive quality information of the insiders would be otherwise imperceptible to the outsiders. However, not all of these actions will bring a signaling effect. In other words, the insider could inundate outsiders with numerous actions but outsiders may only interpret few of those actions into quality signals. That being said, the observability of the signal is critical in the signaling framework. If actions taken are not readily observed or interpreted by outsiders, it is difficult for insiders to communicate those attributes with the outsiders (receivers) and therefore the effectiveness of the signal will be diminished.

In order to create efficacious signals, the observability of the signal is necessary but not sufficient. In the theory of costly signalling, BliegeBird et al. (2005) has suggested that signaling cost is a central dimension within the signaling framework. In reality, some signallers are in a better position to absorb the associated signaling cost than others. The costs associated with obtaining authority endorsed quality guarantees (such as ISO9000) are high because the certification process is complex and time consuming which makes cheating and dishonest signaling very difficult. However, the certification process is less costly for the high-quality manufacturers than the low-quality manufacturers because the former only need to make very limited adjustment to their products to meet the certification standards. If the signaller does not have the underlying quality associated with the signal but believes the benefits of signaling exceed the cost of producing a signal, they may be motivated to produce false signal. In such a case, the misleading signals will be flooding into the market until the receivers learn to ignore them.

Drawing from the literature, signals as either “strong” or “weak” based on some aspects of the signal (Gulati & Higgins, 2003). The strong signals are more readily detected by the receivers than the weak signals are. Such classification more or less overlaps with the studies of signal observability. Therefore, Ramaswami et al. (2010) draw a theoretical distinction between the “strength” and the “visibility” of the signals. According to the conceptualization of these two important signal dimensions, “strength” refers to the importance and the salience of the signal for the signaller that is different from “visibility” which related to the defect of the signal to the receivers.

The effectiveness of signals can also be influenced by two other important factors. First of all, if the signaller does not send signals that are well correlated to the unperceivable quality,

the discrepancy between signal and signaller will create ineffective signalling which is described as “lack of signal fit” (Busenitz et al., 2005, Zhang & Wiersema, 2009). The level of the signal fit is determined by the extent to which the signal is correlated with the unobservable quality. Secondly, the signalling effectiveness can be enhanced by increasing the number of signals within a period of time which is described as signal frequency (Janney & Folta, 2003). Davila et al. (2003) suggest that signals are just essentially snapshots of the unobservable quality in a particular place at a particular time. While the business environment is dynamic and information obtained by the signallers and the receivers are constantly changing, the signallers need to signal repetitively in order to keep reducing the asymmetry of information and keep themselves differentiated in the competitive market (Janney & Folta, 2006, Park & Mezias, 2005). Increasing the frequency of signals can increase the signal effectiveness especially when different types of signals are used to communicate the same message (Balboa & Martí, 2007). Signallers dedicated to increasing signaling frequency should also be aware of the issue of signaling consistency. If the signaling purpose is to send the same message repetitively to consumers, the multiple signals from one source must be consistent otherwise conflicting signals will confuse the customers and reduce the effectiveness of the communication (Chung & Kalnins, 2001, Fischer & Reuber, 2007).

The receivers are considered as different individuals or groups in the management literature. Entrepreneurship studies consider receiver as private and public investors (Busenitz et al., 2005, Daily et al., 2005, Cohen & Dean, 2005, Jain et al., 2008), while strategic management studies considered receivers as stakeholders (Kang, 2008, Park & Mezias, 2005) which include shareholders, investors, competitors, consumers (Basdeo et al., 2006, Carter, 2006). Although receivers refer to different groups of people in different contexts, for the purpose of

this study, the receivers are considered as consumers. Management research has highlighted the importance of receivers for signaling effectiveness. The signaling process will not be effective if the targeted receivers are not looking for the related signal or do not know what they should be looking for. For example, research has found that the young firms' successfulness of their effort of initial IPO largely depends on whether the investors are attending the IPO market (Gulati & Higgins, 2003). Furthermore, signals with weaker visibility, are difficult to find by receivers unless they are looking for them (Ilmola & Kuusi, 2006). Once the receivers have identified a signal and successfully make a decision based on the signal, they are more likely to search for similar signals to help with decision making in the future (Cohen & Dean, 2005).

Moreover, research has noted that the same signal can be interpreted by different receivers in different ways (Perkins & Hendry, 2005, Srivastava, 2001). In this interpretation process, the signals are translated by receivers into perceived meanings. The signals may be "calibrated" by receivers based on their personal experience, understanding and observation of the signal strength (Branzei et al., 2004). The research on organizational behaviour and human resource management has been particularly useful in extending the application of signaling theory to the perspective of receivers (Greening & Turban, 2000, Suazo et al., 2009). For example, it is suggested that job applicants use different signals to evaluate some facets of their potential employer. Due to the fact that different job candidates have different concerns with the employer, they tend to attend to different signals or interpret the same signals in different ways (Rynes, 1991, Highhouse et al., 2007). Receivers may apply weights to signals in accordance with preconceived notions about importance or they may cognitively distort signals so that their meanings diverge from the original intent of the signaller (Ehrhart & Ziegert, 2005, Branzei et al., 2004).

Feedback refers to the information sent back from the receivers to the signallers regarding the effectiveness of the signaling process (Gupta et al., 1999). To improve the effectiveness of the signaling process, receivers can send feedback to the signallers in the form of countersignals. The asymmetry of information works in two different directions: receivers desire information from signallers to reduce the information asymmetry so as to make a better decision and the signallers also desire information from the receivers to find out how exactly the signals are interpreted by the receivers and determine which signals are most useful to attract receivers' attention. The latter direction not only reduces information asymmetry but also can serve as a guideline for signallers to improve their signaling effectiveness in the future (Gulati & Higgins, 2003). As a result, in the similar way that receiver attention can improve signaling process, the signallers' attention to countersignals can also result in more efficacious signaling. It is suggested that such case is particular evident in the context of iterative or sequential bargaining (Srivastava, 2001).

The environment that enables the signal transmission also affects the extent to which asymmetry of information is being reduced by the signals (Rynes, 1991, Lester et al., 2006). The literature suggests that the signaling environment will be distorted if the propagating media of the signal intentionally or unintentionally reduces the observability of the signal. For example, a press release can serve as a signal but the media outlets reporting the release could introduce potential distortions (Carter, 2006). Other than the media, the external referents such as other receivers can also distort the signaling environment between signallers and receivers. University rankings can signal the quality of the university, but students may not make their decision of which university should they study at purely based on the rankings of the universities. In such a decision making process, peer recommendation (word of mouth

of other receivers) is very important and influential (Branzei et al., 2004). One other factor that could potentially distort the signaling environment refers to the bandwagon effect. Bandwagon effect could occur when the receivers are unsure of how to interpret certain signals based on their own judgments, therefore they may imitate others' interpretation of the signals as a means of decision making, while such interpretation may not always be accurate (McNamara et al., 2008, Sliwka, 2007). Furthermore, the literature suggests that the behaviour of other signallers is also important because more honest signallers in the market increase the signaling credibility in general while deceptive signallers bring the opposite effect.

Management research has made significant contributions toward interpreting the complex signalling processes that occur between two parties in an environment of asymmetrical information. The implication of signalling theory from multiple disciplines (Smith & Harper, 1995, BliegeBird et al., 2005, Kirmani & Rao, 2000, Riley, 2001) now forms a more complete picture about signalling theory constructs, relationships and processes. However, signalling theory still needs to extend its boundaries to help to explain a broader range of social and organizational phenomena. In this research, the application of signaling theory is extended to the context of understanding how unknown brands can convey positive product quality information to potential customers and therefore improve their sales performance by driving customers' intention to purchase.

The review of signaling theory has provided several insights to this research. First of all, the signaling theory establishes the relationship between extrinsic cues, perceived quality and purchase intention which has provided theoretical foundations of the research model. In order to communicate with buyers, the signallers must send out signals such as price, package,

warranty, etc. The signals serve as stimulus factors and affect receivers' organism - the consumers' perceived quality of products which in turn, triggered feedback (response) from consumers (receivers) - whether to adopt an approach or avoidance behaviour (purchase intention or behaviour). It has also provided the argument as why product attributes are imperative signals that serve as primary stimulus factors influencing the organism. From the review of signaling theory, it was established that the product attributes which serve as signals from signallers, not only affect the quality perception of the products, but also influence consumers judgements of the intention of producers (Stiglitz, 2000). If the correct product attributes are utilised, the positive signals will be sent out and consumers will have both a positive perception of the product quality and a positive evaluation of the producers as to their intention. On the other hand, if the wrong product attributes were used, not only will consumers have negative perception of the products, they will also question the intention of the producers and therefore have even more doubt in buying the products supplied by the producers. This effect may be more obvious when purchasing unknown brands. For unknown brands, the customers have very limited exposure (or none) to the information of the products prior to purchase and are not familiar with the product names. Therefore, the only communication tool available for brand managers of unknown brands are attributes of the products they can control. Understanding consumers' preference of the attributes that reflect positive quality information and positive intention information is critical for the marketing and the success of the unknown brands. Furthermore, from the studies of signaling theory in regards to consumer behaviours, it was evident that consumers mainly rely on signals to interpret the quality of the products provided (Stiglitz, 2000, Elitzur & Gavious, 2003). Such findings further supported the adoption of perceived quality as an organism factor in the theoretical model.

2.2.4 Cue Utilisation Theory

Product information cues (often referred to as product-attribute cues or quality cues), are important to consumers in making inferences, reducing uncertainty, and forming product preferences. A cue is defined as a characteristic or dimension, external to a person that can be encoded and used to categorise a stimulus object (Schellinck, 1986). Compared to signaling theory, cue utilisation theory further dichotomises signaling attributes into two specific groups of cues that either signal the extrinsic or intrinsic attributes of the products (Szybillo & Jacoby, 1974) and therefore provided more in-depth understanding of differential effects of cues on perceived quality due to its intrinsic/extrinsic nature. Intrinsic cues relate to the physical composition of the product (Szybillo & Jacoby, 1974). For example, intrinsic information cues for a television may include size of the viewing screen and image resolution. Extrinsic information cues are product-related but not part of the physical product. Extrinsic cues can include attributes such as brand name, price, warranties and retailer reputation. A quality cue is valued to the extent that it is believed to signal product quality. This relationship may be conceptualised as a means-end chain. The value of the means (cues) is determined by the value of the end (attributes/benefits) to which they are perceived to lead. In addition to perceived informational value, cue processing is also affected by consumer knowledge and product/purchase involvement (Celsi & Olson, 1988, Zaichkowsky, 1985). Consumer knowledge is an important factor in the ability to process information (cues) (Celsi & Olson, 1988), while product/purchase involvement affects motivation to process information (cues) (Zaichkowsky, 1985). It may be expected that knowledgeable consumers who are highly involved with the product/purchase would process more quality cues and make more cognitive elaborations than would consumers with low knowledge and low involvement.

Under the conditions of information asymmetry and in the highly competitive world of a large number of brands of goods and services, consumers face a higher degree of ambiguity in judging and reaching the right choices in their purchases, especially when it comes to evaluating the quality of the many products they buy. Due to the impractical nature and high cost of money, time, and energy to conduct search and comparative assessment to each and every one of the products which consumers deal with, consumers are more likely to depend on particular cues to estimate quality. According to Dawar and Parker (1994), both the economics and marketing literature have found that signals or cues mostly serve as heuristics in assessing product quality when 1) there is a need to reduce the perceived risk of purchase (Jacoby et al., 1971, Olson, 1977), 2) the consumer lacks expertise and consequently the ability to assess quality (Rao & Monroe, 1989), 3) consumer involvement is low (Celsi & Olson, 1988), 4) objective quality is too complex to assess or the consumer is not in the habit of spending time assessing quality (Allison & Uhl, 1964, Hoch & Ha, 1986), and 5) there is an information search preference and need for information (Nelson, 1970, Nelson, 1974).

Several researchers further develop this phenomenon and propose cue utilisation theory. According to this theory, products consist of an array of cues that serve as surrogate indicators of quality to shoppers (Olson, 1972, Kirchler et al., 2010). The particular cues are evoked according to their predictive and confidence values. The predictive value of a cue (PV) is the degree to which consumers associate a given cue with product quality. This is similar to the diagnosticity of the cue, which represents the reliability of a cue and the likelihood that using it would lead to a successful task resolution (Dick et al., 1990). The confidence value of a cue (CV) is the degree to which consumers have confidence in their ability to use and judge that cue accurately (Olson, 1972, Cox, 1967). Cues characterised by high CV and high PV, assume the greatest weight in the quality assessment process. Research has shown that the consumers' most common cues are most likely to include: product price

(Rao & Monroe, 1989, Olson, 1972, Dawar & Parker, 1994, Kirchler et al., 2010), product warranty (Olson, 1977, Rao & Monroe, 1989, Boulding & Kirmani, 1993, Neranartkomol, 2000), product advertisement (Milgrom & Roberts, 1986, Gotlieb & Sarel, 1992, Dahlén et al., 2008), brand name (Olson, 1977, Dawar & Parker, 1994, Ramaseshan & Tsao, 2007, Taylor, 2009), product appearance (Nelson, 1970, Olson, 1977, Dawar & Parker, 1994), and retail reputation (Dawar & Parker, 1994, Cooper & Ross, 1985, Cudmore, 2000). As noted by Dawar and Parker (1994) the relative importance of these signals and cues generally follow their specificity. The more specific a product cue, the more likely it will provide information that is useful in assessing the quality of that product.

Consumers rely on both extrinsic and intrinsic cues for pre-purchase evaluation of products (Szybillo & Jacoby, 1974, Pincus & Waters, 1975). As noted previously, intrinsic cues include the products' intrinsic attributes such as colour, flavour, texture or nutrition content, which derived directly from physical products and if changed, will change the product itself, while extrinsic cues refer to those attributes that are not related directly to product features, such as price, brand image and store image. Some previous empirical studies have argued that when other things are equal, intrinsic cues such as physical product differences will be stronger determinants of perceived-quality judgments than will extrinsic cues (Szybillo & Jacoby, 1974). Therefore, from Szybillo and Jacoby's (1974) perspectives, in order to unravel the complicated attributes-perception relationship, although both extrinsic cues and intrinsic cues should be taken into consideration, the studies of intrinsic cues should to be given more attention. Through a series of studies, intrinsic cues are found to be product category specific, which means that the most important consumer-affected intrinsic cues vary across product category. For example, studies have found that the most important perceived quality determinant for carpet was the material and its texture (Alsamdan, 1996) while the leading

factor for consumers in judging beer quality was its taste and colour (Szybillo & Jacoby, 1974). Compared to intrinsic cues, extrinsic cues are more general and applicable to a wider range of products. For example, HP sells many computers with different features across different models. The brand name, HP, which is an extrinsic cue, is associated with all the computer models it sells, whereas some specific, intrinsic attributes such as memory size and processing speed are applied only to a particular model. Hence, it is believed that consumers are generally more familiar with extrinsic cues than intrinsic cues, and thus tend to rely more heavily on them when evaluating products. The significant effects of extrinsic cues on product evaluations found in many past studies substantiate such belief (Dodds et al., 1991, Han & Terpstra, 1988).

On the other hand, the extrinsic cues usually represent the results of a company's marketing efforts: the price of a product can be decided by the company, the distribution retailers can be chosen and changed, these are the things that companies can control through their marketing activities. Besides, because the extrinsic factors are carried by any kind of products, the findings of how extrinsic cues affect products in one category can be potentially extended and applied to products in other categories. In other words, tangible products of all kinds, must have a price to be sold, must have retailers to be distributed, must have package to be carried, etc. The features of these extrinsic factors argue for a generalizing ability of findings to all other consuming products. In other words, if a study can demonstrate that selling television in a store with good image can bring positive consumer perception, then it can be assumed that same results could be generalised to the product categories such as apparel, white goods and some other products with similar features. It is therefore believed that studying extrinsic cues can gain results that are more widely generalised than that of intrinsic cues. Furthermore, unlike extrinsic cues, the fluky nature of intrinsic cues has made such features hard to

measure. It is easy to measure the price level of the product as high or low, but it is hard to measure the taste of the food or odour of the wine in view of the fact that the perception towards such features varies across different people. Therefore, the intrinsic cues need to be controlled when studying the effects of extrinsic cues.

Much previous research presumed the existence of certain product attributes, then used quantitative tests to demonstrate whether the assumptions stood. Under this method, there may be some product cues that researchers weren't able to identify and therefore had missed. Taking the environmental factors into consideration, the same extrinsic cues of products may affect consumer's perception and judgements in different forms under different consumption situations. A customer in supermarket may not only look at the nominal price of the product but also compare the price differential of a range of similar products to assist them making purchase decision. In such a situation, the price may not only play as a single cue that signals quality of the products but also the price differentials among products of the similar kind. Similarly, the evaluation of the product package can also be affected by the availability of other products of similar kind. The perception of copycatting other products packaging may trigger avoidance behaviour of customers towards the copycat brands. As noted previously, such situations do exist when consumers face unknown brands in the market. Therefore, before exploring "how" extrinsic factors influence consumers perception towards the quality of unknown brands, the understanding of "what" are the actual extrinsic factors from unknown brands that affect consumers is required. The following sections will review the critical extrinsic factors from the literature of cue utilisation theory and will propose unique extrinsic factors of unknown brands based on their distinctive features.

2.3 MAJOR ANTECEDENTS TO CONSUMERS PURCHASE DECISION MAKING OF UNKNOWN BRANDS

2.3.1 Price Similarity

Price is one of the most important and commonly used evaluative criterion for consumers' product overall evaluation (Scitovszky, 1944). The studies on price and product evaluation can be traced back to early 1940s. Initially, price was generally recognised to have a significant positive relationship with perceived quality, thus affecting the overall evaluation of the products (Tull et al., 1964, Gabor & Granger, 1966, McConnell, 1968). There were two streams of research supporting this relationship and provided an explanation to this phenomenon. The first stream explained this relationship using signalling theory, claiming that price can release signal to consumers which make it an indicator of quality (Jacobson & Aaker, 1987). In this way, consumers will interpret price signal and come to a conclusion that high quality products will be sold at higher prices. Another stream approached this topic from an economic point of view, claiming that people could simply generate a belief in mind that the forces of supply and demand would lead to a "natural" ordering of products on a price scale (Scitovszky, 1944). Both theories suggest that higher price can induce a higher evaluation of the product.

Nonetheless, considerable subsequent research discovered discordant results with some suggesting significant correlation between price and perceived quality while others supported just the opposite (McConnell, 1968, Jacoby et al., 1971, Gabor & Granger, 1966, Sjolander, 1992, Chapman & Wahlers, 1999, Völckner & Hofmann, 2007). Research demonstrated that consumers' dependence on price as a surrogate for quality can be mitigated by time limits, product categories, purchase occasions (Urbany et al., 1996), the importance of quality in the purchasing situation (Tellis & Gaeth, 1990, Aqueveque, 2006), the significance of price

differences among alternatives (Obermiller & Spangenberg, 1989), the consumer's beliefs of quality differences (Veale & Quester, 2009, Veale, 2008) as well as how limited is the available objective quality information (Tellis & Gaeth, 1990), product price levels (McConnell, 1968, Kirchler et al., 2010), price range (Monroe & Krishnan, 1985, Zeithaml, 1988, Murray & Sarantis, 1999, Kirchler et al., 2010, Monroe, 1973) and the availability of multiple product cues (Stafford & Enis, 1969, Prabhaker & Sauer, 1994, Miyazaki et al., 2005). These influential factors of price-perceived quality relationship can be sorted into two categorization namely characteristics of the product and characteristics of the distribution surroundings.

Characteristics of product include factors such as actual price levels, price range and the availability of multiple product cues. The influence of actual price level on price-quality relationship was tested by the work of McConnell (1968). He labelled beer bottles of the same brand with different prices respectively; consumers were asked to taste the beer and give rank to the quality they perceived. It was found that consumers judge quality of beer by price only when the price of beer was above medium price level but the consumers perceive no difference in the beers with price level from medium to low. This explains how price level can potentially affect the significance of price-perceived quality relationship. For the judgments on price range, consumers have an internal reference price that they use for products in the market. Therefore, if the price is too high or too low, it will release extreme signal which bring side effects to price-perceived quality correlation and result in consumers' resentfulness of products and unwillingness to purchase (Zeithaml, 1988). Although such argument does not seem to be consistent with McConnell's (1968) work, the results of two studies in fact do not contradict each other. This is because McConell (1968) has chosen relatively moderate price for all three different price ranges, even the "high" and "low" price

of McConell's study was considered not at an extreme level. Similar findings were found in record on the significance of price differences among alternatives (Obermiller & Spangenberg, 1989, Murray & Sarantis, 1999, Kirchler et al., 2010) which will be elaborated in the next section. It is noteworthy that very few exploratory studies had discussed this question and the testing method limited to manipulating a few set price signals from moderate to extreme (Olson, 1977, Monroe, 1973). Considering its importance on marketing activities, further in-depth studies on the exploration of price range is still needed when researchers argued that the positive relationship between price and perceived quality remained strong while price was the only cue available to consumers. However, in real purchase situations, numerous cues, both intrinsic and extrinsic, will have the potential to affect consumers' perceptions towards product quality, and the effect of price on perceived quality, may be affected while other cues are available to consumers as well. Given most of the price-perceived quality relationship were studied under the context of single cue availability, it is necessary to employ multiple independent cues in the study to generate more persuasive results. For the multiple product cue studies, Stafford and Enis (1969) combined price and store image cues in the same experiment. They demonstrated that under the condition of store image being available, price-perceived quality relationship is very little influenced and price is still strongly positively correlated with perceived quality. Similar findings can be found in a few subsequent studies as well (Rao & Monroe, 1989, Grewal et al., 1998, Yoo et al., 2000). On the other hand, researchers found that brand image can significantly affect consumers' overall evaluation of product quality. While a strong brand image is available, the influence of price on perceived quality will be largely diminished. However, some of the previous research had already checked the influence of brand image on price-perceived quality relationship but no significant influential effect was found. Further investigation by Jacoby et al. (1971) demonstrated that although previous research had frequently employed actual

products in product evaluation studies to proximate reality, the influence of brand image had been investigated by merely manipulating labels on identical products simultaneously. Jacoby et al. (1971) argued that this type of brand image manipulation was oversimplified compared to real marketplace conditions, and the wrong use of this manipulation had caused inaccurate experiment results for the effect of brand image on perceived quality. An improvement to this method would be to use existing brands as independent variables.

Characteristics of distribution surroundings mainly involve the purchasing situation (Tellis & Gaeth, 1990, Urbany et al., 1996, Aqueveque, 2006) and the significance of price differences among alternatives (Obermiller & Spangenberg, 1989). The latter has drawn significant interest from researchers and is particularly related to this study on products with unknown brands. If a company is seeking a cost-leadership strategy, use cheapest price, research shows that too large a price gap between certain brands within the alternatives, can adversely affect the perception of value and quality provided by the brands (Hoch & Lodish, 1998, Murray & Sarantis, 1999, Cudmore, 2000, Kirchler et al., 2010). This finding implies that the price of products can neither be significantly higher than its rivals' nor significantly lower than its rivals. The results that were concluded are consistent with some other existing theories as well. For example, researchers argued that an extremely low price strategy can neither build customer loyalty (Hoch & Lodish, 1998, Yoo et al., 2000) nor avoid rival's price counter attack and consumer "cherry picking" (Kahn & McAlister, 1997); Yoo et al. (2000) discovered that "price cut promotions" such as coupons and price rebates, were harmful for perceived quality and eventually brought a negative effect on the building and maintaining of long-term brand equity. A brand-loyal customer is generally willing to pay full price for their beloved brands and can afford high price elasticity towards price change. The increased market share based on a low price strategy will be lost as soon as the brand's price

competitiveness is gone (Kahn & McAlister, 1997). Therefore, the price of products in comparison to its rivals' in the market stays within a certain range. The implication of this finding is significant, especially for this study of products with brands that consumers did not know. Given the fact that the prices of most unknown brands are set far below the well-known national brands, it seems reasonable to expect that increasing the price of unknown brands within a certain range closer to national brands can increase both consumers' perception of the unknown brand and the profit margin of the producer.

From the perspective of the consumer purchase decision model, the requirements for the evaluation of alternatives will trigger consumers' in-store price comparison behaviour (stage 3), then directing greater attention from consumers which leads to processing effort toward price information more than any other available product information. Thus, the greater the in-store price comparison behaviour, the greater will be the accessibility of price information in memory when buyers try to retrieve the information. An early study on supermarket shoppers has found that over 60% of the supermarket shoppers did check and compare prices at the point of purchase which indicated that they considered price comparison to be an important determinant of purchase (Dickson & Sawyer, 1986). Considering the difficulty of controlling price for long term brand quality evaluation, the focus on the price comparison has larger significance for marketers, especially for those marketing unfamiliar brands to consumers.

Studies on grocery store brands have provided more support for this assumption. Consumers judgment of price is rationally based on their price knowledge as well as the quality information available, and then came into an internal reference price which would be used to compare to the actual price (Urbany et al., 1997). This means that consumers make active evaluations before purchase based on all the information available and conclude a price which they believe "reasonable" to compare to the actual price of the product in order to

make judgment on the value of the product. The products will then be categorised by their different backgrounds into different price level and consumers will set distinct price tiers in mind to distinguish brands and price level in such order as international famous brands, national famous brands and store brands, with which consumers' quality perceptions went down (Blattberg & Wisniewski, 1989, Kahn & McAlister, 1997, Sethuraman & Cole, 1999). In other words, consumers will be more willing to pay higher prices for national brands rather than store or generic brands. The existence of such price tiers is not surprising considering the consumers' limited brand knowledge and the need for incentives and assurance to compensate purchase risk for higher price products. However, the perceived price gap between price tiers is much lower than the actual price gap existing. The actual price differences between the national brands and generic brands was found to be nearly 45% while consumers believed generic brands were around 23% cheaper than the national brands (Hoch & Lodish, 1998). This has therefore provided implications to the researchers and marketers that consumers in fact thought generic brands could be more expensive than they were. Consumers' underestimation of this price gap may provide some space for the increase of grocery store brands without jeopardizing consumers' perceived product quality. It was further demonstrated that even for those price-aware customers, there's still a "latitude of acceptance" which means an acceptable range of price fluctuation that is tolerable (Kalwani & Yim, 1992, Monroe & Krishnan, 1985). Kalwani and Yim (1992) subsequent study substantiated that consumers generally were not able to notice or to respond to less than 5 per cent price change of the products. Therefore, if the price of unknown brands increase by a right percentage which is less than 5 per cent at a time, it is possible that consumers may not be able to notice or reacted to this change unfavourably. It is also noteworthy that the "latitude of acceptance" is not always static. The "latitude of acceptance" can become wider when the reference price is increased to a higher level (Kalyanaram & Little, 1994). Under

this context, it is reasonable to assume that if the price of unknown brands can be referenced with that of famous brands, then the price of unknown brands can be increased up to a point, given the consumers limited pricing knowledge, without growing a negative consumer reaction. It is possible that some price aware customers may be lost; however, consumers of well-known brands may also be attracted to the implied unknown brands' quality and switch their interest towards those unknown brands.

Consistency theory and assimilation-contrast theory have provided more support to the development of the hypothesis for the study. Consistency theory (Osgood & Tannenbaum, 1955) is about the relationship between people's thought and ideas, which identifies that people prefer harmony, or consistency in their thoughts. On the basis of consistency theory, Mandler (1982) predicts that consumers are more likely to respond to moderate price change than to extreme price changes. Therefore, the optimal price of unknown brands shouldn't reside at a level that is extreme (international brands), but should be at a level that is more moderate, which is lower than the price of international brands. In this way, not only the perceived quality of unknown brands is increased because of the price increase, the price may be utilised as a similarity cue to quality categorization with international brands as well. According to assimilation-contrast theory, the reduction of the price gap between national brands and unknown brands can be considered as movement from unknown brands towards the direction of an anchor and will therefore signify an assimilation effect. The assimilation effect then may be very likely to trigger consumers' comparison behaviour.

To sum up, the researcher has sufficient grounds to believe that price, as an extrinsic product cue, will affect consumers' perceived quality of products with brands they do not know and thus affect the overall evaluation of the products. This perception may be moderated by both

characteristics of product and characteristics of distribution surroundings. For the latter, the significance of price differences among alternatives seems to have a more notable moderating effect for price-perceived quality relationship. Therefore, related topics should be addressed in further in-depth studies. Further, the characteristics of unknown brands and their distribution surroundings suggested that consumers may rely on a special price cue to judge the overall quality of unknown brands. Extant literature shows that price similarity cues, that is, price similarity information between unknown brands and its anchor (national brands), is expected to trigger consumers' comparison behaviour. In other words, for unknown brands, consumers are very likely to use price similarity as a cue for quality judgment.

Based on the above review and analysis, the following hypothesis is proposed:

H1a: For products with brands unknown to consumers, the higher price similarity they have to famous brands, the higher consumers' perceived quality.

2.3.2 Package Similarity

Consumer intention to purchase depends on the degree to which consumers expect that the product can satisfy their expectations about its use (Kupiec & Revell, 2001). But when they have not even thought about the product much before entering the store, this intention to purchase is determined by what is communicated at the point of purchase. Packaging becomes a critical factor in the consumer decision-making process because it communicates to consumers at the time they are actually deciding while in the store. How they perceive the subjective entity of products, as presented through communication elements in the package, influences choice and is the key to success for many retail products' marketing strategies.

Since the importance of packaging design and the role of packaging as a vehicle for consumer communication and branding are necessarily growing, in order to achieve the communication goals effectively and to optimise the potential of packaging, retail manufacturers must understand consumer response to their packages, and integrate the perceptual processes of the consumer into the design (Nancarrow et al., 1998, Silayoi & Speece, 2007, Silayoi & Speece, 2004) Thus also implies that knowledge about consumer psychology is important so that manufacturers understand consumer response to their packaging.

For consumers, the product package is the first important element for consumer to identify, recognise and distinguish a particular brand against all the others in a market. It is the ultimate touch point for consumers and the image builders to attract and communicate information with the consumers about the product and the brand at the point-of-sale. The package's overall features can underline the uniqueness and originality of the product. Quality judgments are largely influenced by product characteristics reflected by the packaging and these play a role in the formation of brand preferences. If the package communicates high quality, consumers frequently assume that the product is of high quality but if the package symbolises low quality, consumers transfer this "low quality" perception to the product itself (Underwood et al., 2001, Silayoi & Speece, 2004). Therefore, the package becomes the symbol that communicates favourable or unfavourable implied meaning about the product. Underwood et al. (2001) suggest that consumers are more likely to spontaneously imagine aspects of how a product looks, tastes, feels, smells or sounds while viewing product pictures on the package. Silayoi and Speece (2004) argues that the product package that stands out on the shelf has the most impact on the consumer's decision process. Package design can help to ensure that the consumers' response to the product is favourable.

From empirical studies, it was found that a simple modification in products' packaging can sometimes bring success and rebirth to certain products. The brand "Kleenex", in the summer of 2005, decided to replace the traditional rectangular box of its tissue with an oval shape box. This decision was directly reflected with doubling sales volume in the American market (Hamner, 2006). Although this example does not identify how and why the new packaging brought success but it did illustrate the fact that product packaging can pose a significant influence on the consumers' purchasing behaviour.

Internal factors of packaging

Many studies in this area have conducted the influence of packaging during the consumption experience as well as the link between a product package and its capacity to build a strong brand image and perceived brand quality (Shoormans & Robben, 1997, Henderson et al., 2003, Orth & Malkewitz, 2008). Prendergast and Pitt (1996) categorised the basic functions of packaging by their role in either logistics or marketing. The logistical function of packaging is mainly to protect the product during movement through the distribution channels. This could cause added packaging expense, but serves to reduce the incidence of damage, spoilage, or loss through theft or misplaced goods. The second function of packaging is essentially a marketing role. Packaging provides an attractive method to convey messages about product attributes to consumers. Whatever the functional aspects of packaging as related to logistics considerations, packaging is one of the product attributes perceived by consumers. It cannot escape performing the marketing function, even if a company does not explicitly recognise the marketing aspects of package. There is, of course, a danger that the package communicates negatively, but a package well designed for its marketing function helps sell the product by attracting attention and positively

communicating.

According to Hine (1995), the influence of package on perceived quality has two main components which are the graphic elements such as colour and logo and the structural elements such as size, shape and material. Silayoi and Speece (2007) further divided the packaging elements as either visual elements or informational elements. Visual elements refer to factors such as graphics and colour, placement of visual elements matters, packaging size and shape. Informational elements refer to product information and technology image. If viewing visual and information elements as product cues, the visual elements are most likely to be intrinsic cues while informational elements are extrinsic cues. Consumers respond to different packages in different ways, depending on their involvement (Vakratsas & Ambler, 1999). Since an evaluation of attributes is less important in low involvement decision making, a highly noticeable factor such as graphics and colour becomes more important in choice of a low involvement product (Grossman & Wisenblit, 1999). The effect of colours is the most obvious and well-studied (Imram, 1999). Consumer perceptions of an acceptable colour are associated with satisfaction levels. Positive effect can be achieved by manipulating one or more colour, incident light and nomenclature and brand name appearance. In food service, the food products chosen for display and sale by caterers are selected for their colour and appearance attributes (Imram, 1999). On the other hand, the behaviour of consumers towards high involvement products is influenced less by image issues. For low involvement, there is a strong impact on consumer decision making from the development of the market through marketing communications, including image building (Kupiec & Revell, 2001). The significance of graphics, colour, package size and shape is explained by the images created by the package, whether these images are purposely developed by the marketer, or unintended and unanticipated. For consumers, the package is the product, particularly for low

involvement products where impressions formed during initial contact can have lasting impact. As one of the products attributes' that most directly communicate such messages to the target consumers (Nancarrow et al., 1998), the design characteristics of the package need to stand out in a display of many other offerings.

Many consumers today shop under higher levels of perceived time pressure, and tend to purchase fewer products than intended (Herrington & Capella, 1995, Silayoi & Speece, 2004). Products purchased during shopping excursions often appear to be chosen without prior planning and represent an impulse buying event (Hausman, 2000). A package that attracts consumers at the point of sale will help them make decisions quickly in-store. As the customer's eye movement tracks across a display of packages, and different new packages can be noticed against the competitors. When scanning packages in the supermarket, the differential perception and the positioning of the graphics elements on a package may make the difference between identifying and missing the item (Herrington & Capella, 1995).

Psychological research indicates that brain laterality results in an asymmetry in the perception of elements in package designs (Rettie & Brewer, 2000). The recall of package elements is likely to be influenced by their lateral position on the package, as well as by other usually recognised factors, such as font style, size, and colour. Recall is better for verbal stimuli when the copy is on the right-hand side of the package, and better for non-verbal stimuli when it is on the left-hand side. This may imply that, in order to maximise consumers' recall, pictorial elements, such as product photography, should be positioned on the left-hand side of the package. Size and shape also emerges as a crucial dimension. One way in which consumers appear to use these cues is as a simplifying visual heuristic to make volume judgments. Generally, they perceive more elongated packages to be larger, even when they frequently

purchase these packages and have experience using them. Disconfirmation of package size after consumption may not lead consumers to revise their volume judgment sufficiently in the long term, especially if the discrepancy is not very large (Raghubir & Krishna, 1999).

Pantin-Sohier (2009) examined the impacts of these two components through functional associations (brand beliefs) as well as symbolic associations (brand personality) and suggested that visual aspects (such as colour and shapes) are variables which can be manipulated to cause significant brand image transmission and modification; but these transmission and modifications regarding brand associations are restricted by product attributes and product categories. For example, colour is capable of transmitting significant information about the product and to directly influence the evaluations of the product, and it was found that the brands of coffee packaged in purple tins were judged by the consumers as having better qualities than those in the yellow tins (Pantin-Sohier, 2009). But this result appears strictly restricted to coffee brands, which may not be congruent if one change the product to another category such as bottled water, or instant teas.

Visual imagery on the package is another essential attribute. To be noticed at the point of sale, pictures on the package can be a strategic method of differentiation, enhancing access to consumer consciousness. Hence pictures are extremely vivid stimuli compared to words (Underwood et al., 2001) that are quicker and easier for consumers to process in a low involvement situation. Visual packaging information may attract consumer attention and set expectations for content. A well-produced product image is likely to evoke memorable and positive association with the product.

Orth and Malkewitz (2008) extended the former research and developed a holistic framework

to connect the physical characteristics of the product package with the consumer's reaction to the brand. In their study, five holistic types of package designs as well as the factors that differentiate those package designs were identified. They argue that in order to achieve desired consumer responses, the five major key types of designs which are massive, contrasting, natural, delicate and nondescript designs should be selected respectively for the brand varieties which are rugged, sincere, exciting, competent, or sophisticated. This finding also allow the brand managers to better develop their marketing decisions such as packaging modifications and to select variables which will lead to creating desired responses from the consumers to the building of brand value. However, even though these factors are found to be useful to design, they are hard to control. The visual imagery on the package can be a strategic method of differentiation which will enhance access to consumer consciousness because pictures are extremely vivid stimuli compared to words (Underwood et al., 2001) and also are quicker and easier for consumers to process in a low involvement situation. At the same time, due to the influence of environmental factors such as personal preferences, distribution surroundings, etc., the relationship between internal factors of packaging and consumers' response are quite precarious. The same picture that indicates excitement to one person could mean otherwise to a different person. Such volatile natures of packages' internal elements have made them hard to research and draw valuable marketing implications to marketers.

External firm-related factors of packaging

Pioneering packaging

Despite the above intrinsic cues of packaging, a firm's strategic approach of packaging also plays an important role in affecting perceived brand quality. Normally, a firm either pioneers

on packaging for its new product or imitates package of other existing brands. The previous studies of pioneering packaging have greatly relied on the use of PIMS (Profit Impact of Market Strategy) database. However, the PIMS database include only large and successful pioneers, therefore, the results are based on the database would have a born positive bias against the unsuccessful cases because of the samples in PIMS were only based on successful firms (Golder & Tellis, 1993). This could explain why previous research had predominantly favoured positive results for firm's pioneering packaging practice.

Imitation packaging

The research on another market entry strategy, imitation packaging, though been proved by literature as equally successful to the pioneering packaging, had been neglected and overshadowed by the research on the advantage of the pioneering for a long time. Imitation strategy, simply speaking, means creating look-a-like package for brands. Such strategies are usually motivated by seeking lower initial market-entry cost since research has proved that newly introduced brands can always obtain a certain amount of market share from existing brands which looks most similar to them (Tversky, 1972). Implementing an imitation strategy usually means the company can avoid a large amount of R&D expenses and easily learns from failure of those who came before. The companies who implement this strategy are usually referred to as a "free rider", it makes them spend much less on advertisement and easily catch up their rival's success. Previous studies have found this strategy to be implemented by many of the supermarket home brands to be used as a cue to confuse consumers in distinguishing home brand and national brands (Cudmore, 2000).

Zaichkowsky (1995) put forward that a firm using imitation strategy is utilizing the rival's brand identity thus it may cause damage to the targeted brand and dilute its brand identity.

The result of imitation strategy may cause consumer confusion which is also referred to as “passing-off”. Previous research has demonstrated that the degree of consumer confusion largely depends on consumers’ involvement in purchasing. In grocery shopping, lower involvement of the consumer will be very likely to cause higher degree of consumer confusion (Zaichkowsky, 1995, Loken et al., 1986). This effect makes grocery retailers consider this imitation strategy to be a long term development instead of just a transitional strategy (Cudmore, 2000).

Research in packaging has proven to be a signal to perceived quality both theoretically, empirically and intuitively (Rigaux-Bricmont, 1982, Zeithaml, 1988, Pechmann & Ratneshwar, 1992, Silayoi & Speece, 2004, Orth & Malkewitz, 2008). Package similarity has directly and indirectly proven to be an important cue for perceived brand and product quality. Cudmore (2000) reviewed previous studies on package similarity and put forward four reasons for this argument: 1. It was found that 20% of the people are illiterate and mainly rely on visual contact such as symbols, shapes and colours (Zaichkowsky, 1995), 2. brand evaluation will be effected by high levels of package similarity (Rosch & Mervis, 1975). 3. similarities between brands may generate variation in brand loyalty (Allenby & Rossi, 1991) and 4. consumers will have higher prototypical views of the brand if the brand has higher similarities on features or cues with other brands within the same category (Muncy, 1996).

Nevertheless, consumers’ reaction to a firm’s intentioned imitation strategy may not always be positive. Due to package similarity of certain characteristics such as colour, size and shape, consumers may become confused about brands and mistakenly purchased a brand that wasn’t what they initially wanted. Under this circumstance, the consumers may feel that they had been tricked and will be disgusted with the behaviour of imitators. A major stream of research regarding brands with such features has referred to such brands as “copycat brands”

(Horen & Pieters, 2012). Copycat brands imitate the trade-dress of a leading brand, such as its brand name or its package design, to take advantage of the latter's reputation and marketing efforts. Copycat is pervasive. For example, Sayman et al. (2002) observed that blatant package imitation occurred in one-third of the 75 consumer packaged goods categories that they studied. Likewise, in a United States survey, Morton and Zettelmeyer (2004) found that half of the store brands surveyed were similar to a national brand package in colour, size and shape. Most copycats imitate distinctive perceptual features of the leader brand, such as the colour, depicted objects/or shape of the package or the letters and sounds of the brand name (Retail, 2007). Thus, copycats imitate the lilac colour of the Milka chocolate brand, the bull of the Red Bull energy drink, the spike-shaped bottle of Scope mouthwash, the specific letters of the Godiva chocolate brand name, as in "Dogiva", or the Wal-Mart sound, as in Wumart. Feature imitation is a strategy that is often used to copy successful leader brands. This type of imitation has received most attention in the marketing and trademark literature (Loken et al., 1986, Howard et al., 2000, Zaichkowsky, 2006, Kapferer, 1995). Extant research has examined the confusion of copycat brands with leader brands due to various degrees of feature imitation (Loken et al., 1986) and has investigated the influence of the degree of feature imitation on copycat evaluation (Horen & Pieters, 2012, Warlop & Alba, 2004). Therefore, in consumer's minds, there may be an accepted range of package similarity that does enhance brand recognition and perceived quality evaluation. However, any further attempts beyond this range may cause negative effects as the brand may be seen as merely a large corporation brand imitator. It is one matter to learn from others success, while quite another to use subterfuge to be others. Firms need to be careful about their imitation intentions as consumers may be influenced by such and react emotionally to the cues.

Although the influences of package similarities are well grounded in advertising literature (Dröge & Darmon, 1987, Miniard et al., 2006), little attention has been received under the context of unknown brands. Packaging their products similarly to those famous large corporation brands, unknown brands have the potential to evoke feelings of familiarity, stimulate consumer recognition and are expected to increase perceived product quality and overall evaluation. As previously discussed, the degree of similarity may mitigate such effect, mainly dependent on unknown brands' presumed intention of imitation. Therefore, we propose:

H1b: For products with brands unknown to consumers, the higher their package similarity is to famous brand, the higher consumers' perceived quality towards the products.

2.3.3 Third-Party Organization Endorsement

The use of third-party organization (TPO) endorsement is very general in product advertising nowadays and has grown increasingly popular in recent years (Feng et al., 2008). TPO endorsement refers to those advertisements that incorporate a positive evaluation of the advertised products from an identified third-party organization or an individual. In this process, a TPO is usually perceived by consumers to be an organization that is independent from the advertiser itself (Dean & Biswas, 2001, Dean, 2000).

TPO endorsements are quite commonly found in advertising. A TPO endorsement format could include: the “car of the year” award from Motor Trend Magazine for certain car brands, “5 star rating” for reliability and service from PC World magazine for PC brands or “most reliable and healthy food” from XX association for grocery brands. The frequent uses of TPO

endorsement in advertising indicate that marketers believe TPO endorsement have an effect on consumers' attitudes. There are various magazines or consumer organizations, including nonprofit and for-profit, that serve as TPOs (Feng et al., 2008). From the study of source credibility literature, signaling theory, information economics theory and cognitive consistency principle, researchers have found that TPO endorsement are perceived by consumers as an extrinsic quality cue similar to other cues such as price, retailer reputation and package (Dean, 2000, Dean & Biswas, 2001). The main reason that researchers see TPO endorsement as a quality cue may be that TPO endorsement may inform consumers of the unobservable but desired product features such as durability, reliability and other positive performance characteristics (Dean & Biswas, 2001, Feng et al., 2008, Dean, 2000, Akdeniz et al., 2013). Therefore, by informing consumers of experience and credence characteristics of a product prior to purchase, TPO endorsement may lower perceived purchase risk. The influence of TPO endorsements on sales of the endorsed products has been mentioned in academic literature and marketing reports (Chen & Xie, 2005). This is particularly evident for automobile rating companies such as J.D. Power Company, whose ratings will indicate car features like reliability and durability, which cannot be usually known by consumers prior to product purchase. This argument also received support from empirical evidence. According to the Wall Street Journal, after J.D.Power company rated Buick LeSabre as the most trouble-free American car, sales rose 62 per cent in the following season (Peterson et al., 1992). Similar sales increase also happen to Chevy Suburban while the mode was rated by J.D. Power and Associates as the highest ranked full-size SUV in quality and Ford F-150 as the highest ranked light-duty full size Pick-up in quality (Feng et al., 2008). On the other hand, the unfavourable statements from TPOs can also be effective, for example, after being criticised by Consumers' Union Press Conference for its rollover tendency in crash-avoidance maneuvers, the sales of Isuzu Trooper dropped 26 per cent within one season (Rechlin, 1996).

The ability of TPO endorsements to increase sales of endorsed products may lead companies to believe that including TPO endorsements in their advertisements is an optimal marketing strategy. However, companies have to pay the TPO for using its endorsements for marketing purposes. By placing a TPO endorsement in the advertisement, companies may enhance their credibility of claims because the included information comes from an independent source. Further, TPO endorsements advertisements highlight the quality of the advertised product and distinguish the endorsed product from competitors. At the same time, the unique characteristics of TPO endorsements, such as expertise and trust-worthiness, may reduce consumers uncertainty in a purchase situation (Dean & Biswas, 2001).

Despite the critical role of TPO in increasing company's sales performance and the growing importance of third-party information, few studies examined the effect of TPO endorsements on consumers' perceptions of endorsed products or services and research examining its simultaneous effects with marketing cues on consumers' decision making is especially absent. Peterson et al. (1992) investigated whether print advertisements containing a TPO endorsement were more effective than advertisements not containing an endorsement in influencing consumers' attitudes and purchase intentions. This study revealed no TPO endorsement effects. However, Dean (1999) found TPO endorsement effects on consumer perceived product quality, uniqueness, and manufacturer esteem and concluded that TPO endorsements might function as an advertising cue for enhancing consumers' perceptions of endorsed products. Dean and Biswas (2001) further compared advertisements containing a TPO endorsement to advertisements containing a celebrity endorsement and advertisements not containing an endorsement in terms of the ability to affect perceived product quality, attitude toward the manufacturer, purchase risk, and information value of the ads. Advertisements containing a TPO endorsement were found to be more effective than

advertisements containing a celebrity endorsement and advertisements not containing an endorsement in enhancing respondent perceptions of product quality. Although Dean and Biswas (2001) proposed that TPO endorsements might function as signals of quality, they did not further investigate TPO endorsements empirically within the framework of signaling theory. In order to fill the gap in the knowledge about the signaling function of TPO endorsement, Feng et al. (2008) examined whether TPO endorsements in advertising may function as signals of quality within the framework of signaling theory and explored conditions that a firm may receive benefits from using TPO endorsements in advertisements if TPO endorsements function as signals of quality. The study shows that TPO endorsements in advertising are signals of high quality in a separating equilibrium condition where the TPO is perceived as honest and endorses few high quality products. However, TPO endorsements in advertising are not signals of quality in a pooling equilibrium condition, where the TPO is perceived as dishonest and endorses many low quality as well as high quality products. The results of Feng et al. (2008) are consistent of with the predictions of signaling theory.

Other research indicated that the TPO signals can be enhanced while uncertainties increase in purchase settings. The rise of on-line purchasing indicates that there will be more consumers deprived of the opportunity for the physical inspection of the goods before purchase. The research from direct marketing had reported consumers' perceiving a higher level of risk with online purchases as compared to in-store purchases (Akaah & Korgaonkar, 1988). In the absence of physical appearances, TPO endorsement can play an important role in reducing the perceived risk of on-line purchase and reliable TPO endorsement can send stronger quality signals to consumers in such context to alleviate their concern about the uncertainty of the products.

TPO endorsement is beneficial to both consumers and marketers as it may not only communicate experience and credent characteristics of products to consumers prior to purchase but also be useful in positioning brands against market competition. Researches have demonstrated that an endorsement cue can be more useful for consumers' product cue evaluation if the brands were not familiar to the customers (Dean, 2000). Dean argued that endorsement cue interacted with brand cue such that the perceived quality of a low image brand was enhanced to a greater degree than that of a high image brand. Therefore, if the brand cue provided is extremely insufficient (which is the case for brands that consumer's don't know), we can expect a higher TPO endorsement effect for consumers than that of famous brands.

If TPO endorsements function as signals, then the effects of TPO endorsements should be consistent with the prediction of signaling theory. In the long term, a false signal will make both low quality brands and the TPO suffer. The firms may directly lose money on wrong advertising campaigns that try to boost recognition as an award receiver because consumers may not perceive the TPO endorsement in advertising as a quality signal. Moreover, consumers who buy low quality products may not trust the products any more than before even though those low-quality brands truly improve their product quality. In this scenario, the TPO will also suffer for the loss of reputation. On the other hand, if TPO endorses high quality brands, then such TPO endorsements will be sending consistent signals as indicated by the true quality of the brands. In the long term, the reputation of the TPO will be benefited and the credibility of the TPO endorsements will also improve. However, in the situation of unknown brands purchasing, because the quality of the unknown brands are uncertain, endorsement by a reliable TPO can signal high quality to consumers to help them make their initial purchase decision while a less reputable TPO may not be able to send signal strong

enough to convince consumers about the quality of the products. Previous research has also indicated that independent third-party product information from a credible source is often perceived as being more credible and less biased than marketing cues such as brand and package (De Maeyer & Estelami, 2011). A trustworthy and independent third-party agent has no reason to give a product a high quality rating when it is actually of low quality as doing so would hurt the agent's credibility in consumers' eyes (Benedicktus et al., 2010, Akdeniz et al., 2013). Therefore, if the right TPOs are used, the firms of unknown brands can directly inform more consumers about their high quality and enhance the perceptions of their products and increase sales. Compared to celebrity endorsements that are normally costly, TPO endorsements are a cheaper way to produce a similar result but more effective than celebrity endorsements in terms of influencing consumers' perceptions of product quality. The high quality unknown brands can use this strategy to distinguish themselves from low quality brands. Under this context, we propose the following hypothesis:

H1c: For products with brands unknown to consumers, the higher the level of Third Party Organization Endorsement in product advertisement, the higher the perceived quality of unknown brands.

2.3.4 Retailer Image

Image has had a long history in the study of marketing, and, as a concept it is one of the cornerstones of consumer behaviour history (Mamalis et al., 2005, Blackwell et al., 2005, Baker et al., 2002). Different retail stores carry different images in the market place. As the marketplace has become increasingly competitive for retailers, the need for differentiating themselves from competitors by actively promoting their retailers' image has become crucial

for retailer's survival (Baker et al., 1994, Ailawadi & Keller, 2004, Helgesen et al., 2010, James et al., 1976, Sirgy & Samli, 1985, Dodds et al., 1991). The image of a retailer possessed in the minds of consumers was assumed to consist of all the knowledge and beliefs about the retailer's stores resulting from consumers' experiences or impressions based upon the evaluations of merchandise, quality, pricing, assortment, locational convenience, salesclerk service, store atmosphere and pleasantness of shopping (Hildebrandt, 1988). Therefore, the image of a retailer consists of the way it is perceived by the consumers (Zimmer & Golden, 1988). The literature suggests that retailer image is a set of attitudes based upon evaluation of those retailer attributes deemed important by consumers (James et al., 1976). Based on such assumptions, the concept of retailer image has been treated as consisting of distinct multiple dimensions, elements, components or attributes. In other words, consumers perceive the stores of retailer on a number of dimensions which collectively make up the store/retailer image (Hirschman et al., 1978). The conceptualization of the retailer image is extremely difficult as consumers perceptions are built upon attitude and opinions, situational and experience dependent, and vary across regions, markets and store formats. They contain tangible and intangible factors, functional and psychological attributes both emotional and factual material (Burt et al., 2007). Due to the complexity of the retail image dimensions, the main stream of literature treat the retailer image as a multi-dimensional concept and define a retailer's image as the sum of all the retailer's attributes based on consumers' perceptions of their experiences with the store while the perceptions are determined based on factors such as products, price, service and atmosphere (Bloemer & Odekerken-Schroder, 2002). Approaching the conceptualization of store image from customer experience is also consistent with another stream of research in retailer image literature which defines retailer image as being a set of attitudes based on the evaluation of the store's attributes that are considered important by customers (Kunkel & Berry, 1968,

James et al., 1976). Since attitudes are formed through a learning process, the store's image therefore depends on the customer's experiences with it. Blackwell, Miniard and Engle (2005) extended previous research and examined another aspect of store image, from which they found that each store apparently has a set of associations and other information that are stored in shoppers' memories. The full set of these associations defines the image of a given store. These associations can involve the outward characteristics of a store as well as the benefits and feelings that come from buying from it. They can also include symbols, people, advertising campaigns, slogans and logos, among others. According to Hawkins et al. (2007), store image refers to customers' schematic memory which contains the interpretation about the attributes, benefits and characteristics of the store. It is what people feel and think when buying from a certain store or hearing comments about it. Thus, it is the set of associations that consumers learn about a store.

A brand's image is a combination of customer's subjective perception of the products intrinsic attributes as well as its distribution surroundings (Porter & Claycomb, 1997). A number of previous studies in the areas of marketing and consumer behaviour have highlighted the importance of retailer image affecting consumers' purchase decision making (Baker et al., 2002, Hawkins et al., 2007, Seock, 2009, Hsu et al., 2010, Mohan et al., 2013, Ryu et al., 2012). Retailer reputation can be an important cue through its association with the consumer's personal values and image (Reynolds & Jamieson, 1985) and may act as another cue to categorization for the consumer (Jacoby & Mazursky, 1984, Baker et al., 1994). Retailer image, in itself, serves as a diagnostic cue of store equity to consumers and allows them to infer the quality of merchandises. On the other hand, like the development of brand equity of merchandise brands, it may take a long time and substantial investments for a retailer to set up a favourable image among consumers. Consequently, consumers would be

highly confident in the signaling ability of store image. The signal activates the transfer of store equity to the equity of brands sold in the store. As a result, consumers may perceive brands sold by a high-image store to carry higher quality than a low-image store. Such assumption is particularly relevant to this study, as while consumers lack reliable signals to make judgments on unknown brands, the retailer image is more likely to serve as diagnostic cue for quality judgments. Effective retailer image management requires detailed knowledge about the theoretical background and the saliency of the dimensions underlying retailer image concept. Understanding of the retailer image permits management to correct or change the negative aspects of their operations and to improve their performance in the direction preferred by their consumers. The retailer image serves as an analytical tool for store choice, but is widely used as an analytical device to diagnose the weaknesses and strengths possessed by each store relative to others (Wu & Petroschius, 1987).

Distributing products through a retailer who has a good image can signify that the products have good quality. Indeed, choosing good distribution channel means more spending on shelf lease; but on the other hand, a store with good image usually has better customer traffic than a store with a bad one thus turnover of products are usually higher than the latter which compensates the financial loss on lease. Besides, potential customers are willing to pay more attention, contact and visit stores with a good image; such stores can also provide higher level customer satisfaction and trigger off more positive consensus among consumers (Rao & Monroe, 1989). Therefore, based on the review of previous literature and taking the context of this study into consideration, it is reasonable to propose the following hypothesis

H1d: For products with brands unknown to consumers, the higher the retailers' image, the higher consumers' perceived product quality.

2.4 THE CONCEPTUAL FRAMEWORK OF CONSUMERS UNKNOWN BRANDS PURCHASE DECISION MAKING

2.4.1. Stimulus-Organism-Response theory

The S-O-R (Stimulus-Organism-Response) paradigm (Mehrabian & Russell, 1974) has been extensively used in studies that measure the effect of the perceived product features on consumer responses (Jeong et al., 2009). The S-O-R paradigm states that the environmental stimuli influence consumers' internal states, which in turn influence consumers' overall responses. In addition, consumers' internal states mediate the relationship between the stimulus and individuals' responses. In other words, the stimulus-organism-response paradigm, based on environmental psychology theories, suggest that environmental stimuli (S) lead to an emotional reaction (O) that, in turn, drives consumers' behavioural response (R). In their stimulus-organism-response model, the stimuli are external to the person and consist of various elements of the physical atmosphere (Bagozzi, 1986). The organism refers to internal processes and structures intervening between stimuli external to the person and the final actions or responses (Bagozzi, 1986). This implies that the effect of atmosphere (the stimulus) on consumer behaviour is mediated by the consumer's emotional state. According to Mehrabian and Russell (1974), emotional states fall into three basic domains: pleasure, arousal, and dominance. Dominance, however, has been shown to have a non-significant effect on behaviour (Donovan & Rossiter, 1982, Donovan et al., 1994, Russell & Pratt, 1980). These emotional responses result in two contrasting behaviours: either approach or avoidance. Approach behaviour involves a desire for staying, exploring, and affiliating with others in the environment (Booms & Bitner, 1980) whereas avoidance behaviour includes escaping from the environment and ignoring communication attempts from others (Donovan & Rossiter, 1982). Applying Mehrabian and Russell's model, many studies have been conducted on the

role of environmental stimuli as a predictor of emotional responses, such as pleasure or arousal and as a predictor of consumer behaviours, such as time spent in a store and actual incremental spending (Donovan & Rossiter, 1982, Wakefield & Blodgett, 1994, Wakefield & Blodgett, 1996).

Mehrabian and Russell (1974) conceptualised their model for a variety of environments, and the model has been much applied in both retail and services domains (Machleit & Mantel, 2001). For example, Bagozzi et al. (1999) examined the S-O linkage of the Mehrabian and Russell model demonstrating that emotions associated with consumption are formed in response to a specific appraisal made by the consumer (Bagozzi et al., 1999). Baker et al. (1992) reported associations between store environment and the emotional states of pleasure and arousal. Wakefield and Baker (1998) suggested that the overall architectural design and décor of a mall are the key environmental elements in generating excitement among customers.

Donovan and Rossiter (1982), who were the first to apply the S-O-R paradigm in retail contexts, claimed that the Mehrabian-Russel model focuses on the intervening variables, while taking a more general approach regarding the stimulus factors. That is, the issue of the stimulus classification is not addressed clearly by Mehrabian and Russell (1974). In the marketing literature, one can find different approaches undertaken in using the S-O-R paradigm. Some authors use consumers' assessments of the stimuli in order to represent the stimulus part of the model (Chang & Chen, 2008, Jang & Namkung, 2009, Koo & Ju, 2010), while others use actual stimuli (Kim & Lennon, 2010, WangHernandez et al., 2010). The present study adopts the S-O-R paradigm by using various product cues (extrinsic, intrinsic & environmental) of unknown brands as the environmental stimulus. Perceived product quality

reflect the Organism variable, which intervenes between the product cues and Responses (purchase intention). The theoretical underpinning of adopting the identified variables as follows:

2.4.2 Stimulus: Product Attributes

Based on the S-O-R model of Mehrabian and Russell (1974), the stimulus refers to attributes (product features, brand reputation, promotion, price, layout, music, services) that are located in the environment and influences individual's affective and cognitive states (organism). This study considered product attributes that consumers encounter as stimuli that activate consumers' affective and cognitive processes. For known brands, a well-known familiar brand name associated with a positive brand image creates competitive advantages in terms of increasing consumers' interest, attention and positive evaluation of the product (Porter & Claycomb, 1997). While for unknown brands, the absence of a known brand name significantly changes such situation and consumers tend to allocate more attention to factors of the products they perceived "familiar", based on past purchase experience, and engage more effort in processing information about a product's available attributes (price, package, colour, etc.). When consumers lack knowledge about a product, the attributes that reflect positive product features can play an important role in reducing perceived risk and assessing product quality.

2.4.3 Organism (cognitive states): Perceived Quality

Cognitive states are defined as the internal mental states of individuals (Eroglu et al., 2001). The cognitive state investigated in this study was perceived quality. Marketing researchers define quality as the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs (Kotler, 2000). Quality also can be represented in two forms: objective and subjective. The former refers to the measurement of products on pre-existing criteria that are agreed upon to indicate superiority- the actual quality, while the latter refers to a consumer's perception of quality which represents a human response to a product that is highly relativistic and known to differ between judges (Kotler, 2000). Perceived quality also represents consumers' judgements regarding a brand's overall excellence or superiority (Zeithaml, 1988). The concept of perceived quality is of major importance to marketers because product quality evaluations are subjective rather than objective. Research further supports the view that store brands and brands with some unknown features are perceived to have a lower quality than national brands (Richardson et al., 1994, Bellizzi et al., 1981, Bushman, 1993). Richardson et al. (1994) have identified that perceived quality has a greater influence on consumer decision making than other factors such as value-for-money- even for purchasers of store brands and lesser known brands. Similarly, Hoch and Banerji (1993) determined that perceived quality was positively related to the market share of private label brands and lesser known brands across 180 product categories. Other research supported the notion of the importance of perceived quality on brand performance and consumers' willingness to purchase, especially in the context of purchasing brands with lesser known brand names (Dodds et al., 1991, Richardson et al., 1994, Garretson et al., 2002, Scattone, 1995).

Marketing studies have consistently shown that perceived quality is a key determinant of success for private label brands and brands with certain unknown features (Hoch & Banerji, 1993, Richardson et al., 1994). There are various strategies available to improve perceived quality, such as increasing advertising budgets (Kirmani & Wright, 1989, Kirmani, 1990), increase objective quality (Berry, 1995, Howell, 2001, Miller, 1992) and increase the brands' physical similarity to better known, more highly regarded, national brands (Sayman et al., 2002).

For well-known brands, positive perceived quality may be enhanced by a well-known brand name compared to an unknown brand. While the feature of a brand name is absent in the purchase settings of unknown brands, the effects of brand name are diminished to a minimum degree. Therefore, for unknown brands, it is more likely that positive perceived quality is supported by positive product cues that consumers are familiar with. Previous research found a mediating effect of product cues on purchase intention through perceived quality (Bao et al., 2011). Compared to well-known brands, unknown brands have a better potential to communicate with consumers through information created by product cues such as price, package, shelf layout, colour, label information etc. Consumers may make inferences of product value and store image based on unknown brands associated with positive product cues that convey higher quality signal.

2.4.4 Responses: Purchase Intentions

According to the SOR paradigm, consumer responses refer to approach or avoidance behaviours, which are consequences of affective and cognitive states (Eroglu et al., 2003). Approach behaviours include positive responses such as purchase intentions and patronage intentions (Eroglu et al., 2003). Behavioural intention may be a function of some product cues, such as store image. Positively evaluated store image, price cue and package cue enhance consumers' willingness to purchase a product, patronage intention and loyalty (Kim, 2004, Hsu & Liu, 1998, Bloemer & De Ruyter, 1998).

In an unknown brands' purchase setting, many stimuli could influence the customer's emotional state. These stimuli encompass both tangible and intangible features of the products such as, price, package, label information, warranty, etc. and environmental factors such as physical environment, customer services, etc. Although there has been some research on S-O-R theory regarding the stimuli component, the results of the studies are highly discordant and the research on what constitutes the (S) components in the context of unknown brands purchase remains scant. The review of cue utilisation theory, signaling theory and assimilation-contrast theory provides insights into the possible stimuli in the unknown brands' purchase shopping environment, which is complementary to S-O-R theory in the research model. The extension of S-O-R theory to the unknown brands' purchase context with integration of other major theories provides a solid theoretical foundation for this study.

Based on cue utilisation theory, signalling theory, assimilation contrast theory and the environmental psychology model (SOR model), this study hypothesises that the increase of unique cues that convey positive quality evaluation will increase perceived quality of

unknown brands and subsequently increase consumers' willingness to purchase unknown brands. This thesis endeavours to shed light on providing an alternative strategy for brand managers of SMEs to successfully develop their brands and increase sales and profits.

As presented in Figure 2.1, the Mehrabian and Russell (1974) stimulus-organism-response (S-O-R) paradigm in environmental psychology is applied to depict the process by which visual aesthetic stimuli influence consumers' perceived product quality. The signaling theory and cue utilisation theory supported the hypothesis between product cues of unknown brands and perceived quality. The first stage of the model development has focused on the influence of specific individual product cues of unknown brands (price similarity, package similarity, third party organization endorsement, retailer image) on perceived unknown brands' quality. S-O-R theory addresses how various product attributes influence consumer internal states and behavioural responses in the context of unknown brands shopping which leads to the second stage of the model development. The sequence of effects in the model is that various product cues (Stimulus) influence consumer's perception of unknown brands quality (O), finally influencing customer purchase intentions (R). The S-O-R is able to show a full and clearer picture of the process of product cues of unknown brands affecting consumers' perceived quality and subsequently influencing consumers' intention to purchase unknown brands. The right product cues acting as stimulus can send positive signals to consumers and create positive cognitive state –perceived quality, then a positive cognitive state subsequently generates approach behaviour from consumers as a response which triggers purchase behavioural intention. Therefore, the relationship between perceived unknown brands quality and consumers purchase intention of unknown brands is proposed as follows:

H2: For products with brands unknown to consumers, consumers' perceived unknown brands quality is positively correlated with consumers purchase intention of the unknown brands.

Furthermore, although S-O-R theory, signaling theory and cue utilisation theory all support the assumption that product extrinsic cues of unknown brands (S) affect consumers purchase intention of unknown brands (R) through their influence of perceived unknown brands quality (O), there are other studies in the literature of consumer behaviour that explored the direct relationship between product extrinsic cues and consumers purchase intention. Several studies have found direct relationship between multiple product cues and purchase intention in different shopping settings (Idoko et al., 2013, Carpenter & Moore, 2006, Lichtenstein et al., 1993, Yoo, 2011). Consumers sometimes make purchase decision by focusing exclusively on one single product cue. When consumers are unwilling to pay a higher price for distinguishing features, they use price as the only judgment standard for purchasing and make their purchase decision exclusively on paying low prices (Monroe & Petroschius, 1981, Sinha & Batra, 1999, Lichtenstein et al., 1993). The literature refers to such consumers as having price consciousness (Lichtenstein et al., 1993). Accordingly, price consciousness is defined as the level consumers value for price when choosing a certain product (Wu et al., 2011). A number of previous studies have highlighted the importance of low price in driving consumers purchase intention of less famous brands (Burger & Schott, 1972, Carpenter & Moore, 2006, Lichtenstein et al., 1993) which shed light on the study of unknown brands. It is reasonable to assume that price related cues might be an important predictor of the unknown brands purchase therefore affecting consumers' purchase intention directly. Studies also demonstrated that purchase intention can also be driven directly by other extrinsic cues such as perceived store image (Baker et al., 1994, Buckley, 1991, Mohammad et al., 2012, Yoo, 2011), brand name (Idoko et al., 2013), etc. In fact, it is reasonable to assume that

purchase intention may be driven directly by any product cue in certain purchase situations. As for unknown brands purchase, consumers are not able to identify the name of the brand therefore they may simply purchase a product with a certain endorsement seal from a recognised third party organization because consumers had knowledge, trust and positive attitude to the third party rating organization. Consumers may also purchase a product based on the packaging because they think the packaging is attractive and such purchase may not always have to be rational especially when the price is low. Accordingly, it is hypothesised that consumers' intention to purchase of unknown brands can be driven directly by product cues of unknown brands which lead to H3 of the study:

H3a: For products with brands unknown to consumers, the higher price similarity they have to famous brand, the higher consumers' intention to purchase the products.

H3b: For products with brands unknown to consumers, the higher their package similarity is to famous brand, the higher consumers' intention to purchase the products.

H3c: For products with brands unknown to consumers, the higher retailers' image, the higher consumers' intention to purchase the products.

H3d: For products with brands unknown to consumers, the higher level of Third Party Organization Endorsement in product advertisement, the higher consumers' intention to purchase the products.

It should be noted that H3a was set with the condition that the price of unknown brands could not be set at the level or higher than the price of the national brands otherwise consumers

may receive extreme signals and reject the entire message by not considering purchasing unknown brands at all.

From the review of literature and the hypothesised relationships among extrinsic cues, perceived unknown brands quality and purchase intention, the research has proposed its theoretical model. According to cue utilisation theory and signaling theory, H1 and its supporting literature reflected the direct relationship between extrinsic cues and perceived unknown brands quality. According to S-O-R theory, H2 reveals the direct influence of perceived unknown brands quality and consumers' willingness to purchase unknown brands. Through the analysis of these processes in the conceptual model, it is shown that extrinsic cues of unknown brands, drives consumers intention of purchase through their influence of perceived unknown brands quality. In this process, according to S-O-R theory, perceived unknown brands quality is recognised as an active organism intervenes between the stimulus (extrinsic cues) and response (consumer behavioural intention). According to Baron and Kenny (1986), such relationships formulate a mediation process while the effects of stimuli on behaviour are mediated by perceived unknown brands quality. Therefore, it is hypothesised:

H4: For products with brands unknown to consumers, consumers' perceived unknown brands quality mediates the relationship between extrinsic cues and purchase intention.

H4a: For products with brands unknown to consumers, consumers' perceived unknown brands quality mediates the relationship between price similarity and purchase intention.

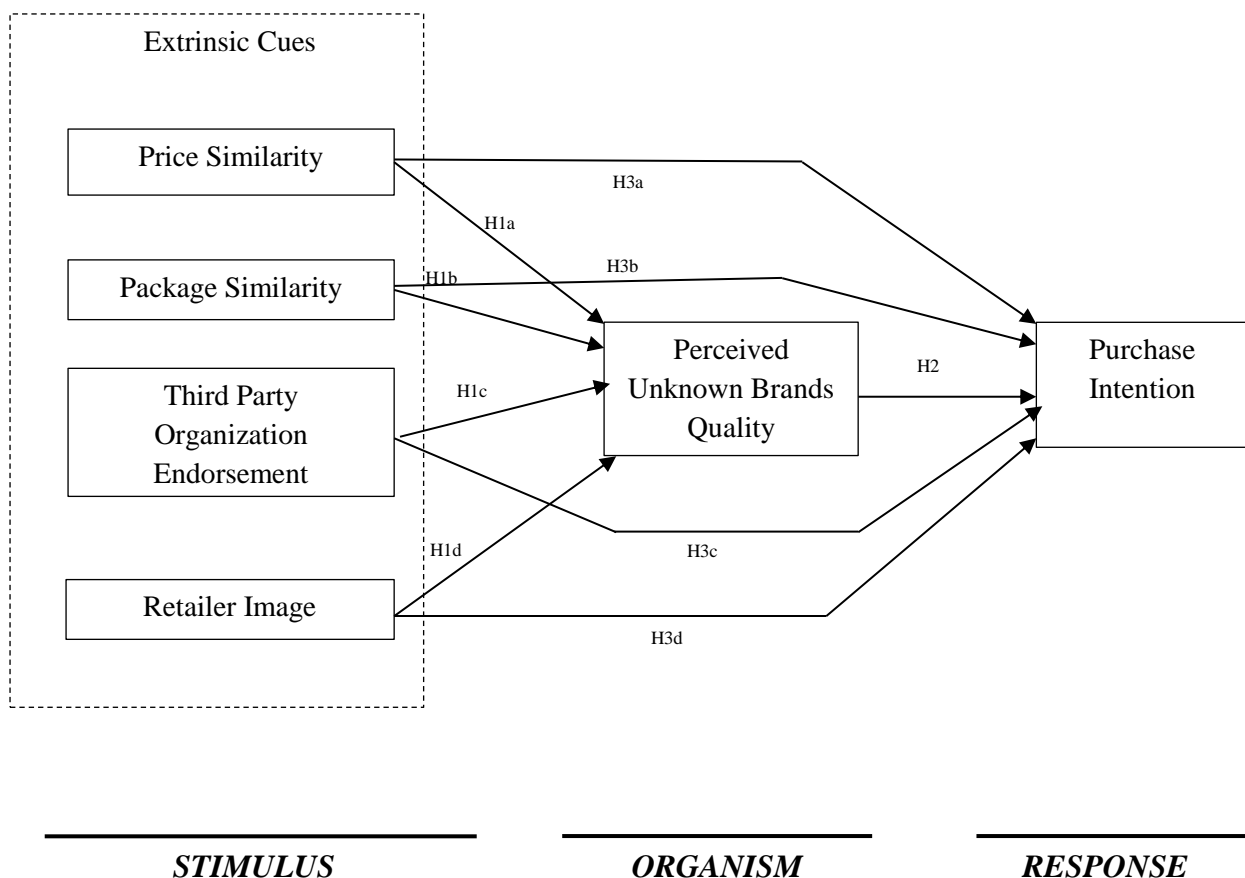
H4b: For products with brands unknown to consumers, consumers’ perceived unknown brands quality mediates the relationship between package similarity and purchase intention.

H4c: For products with brands unknown to consumers, consumers’ perceived unknown brands quality mediates the relationship between third party organizations endorsement and purchase intention.

H4d: For products with brands unknown to consumers, consumers’ perceived unknown brands quality mediates the relationship between retailer image and purchase intention.

The conceptual model of the study is finalised and shown in Figure 2.1.

Fig.2.1: The Research Model.



2.5 CHAPTER SUMMARY

This chapter reviewed the relevant literature and identified significant research gaps. The first section reviewed major relevant theories of consumer behaviour and their relevance to our study of unknown brands' purchase. The predictive powers of most existing theories are limited by their implementation in specific shopping contexts. These theories to some extent lack strength to predict consumers' behaviour in unknown brands' purchase setting due to the unique characteristics of unknown brands. Therefore, it is concluded that no existing theories are able to provide effective model investigating consumers behaviour in the unique unknown brands shopping environment. In this regard, conceptual and empirical extensions seem necessary and an integration of these theories may be needed.

The second section reviewed the major stimuli of consumers' behavioural intention, especially focusing on developing and investigating stimuli of unknown brands that are similar but unique comparing to famous brands. Synthesizing a large number of studies while integrating their similar factors, the study has proposed four major stimuli that may affect perceived unknown brands' quality directly and developed two unique factors that are different from traditional extrinsic cues of famous brands based on the extension of assimilation and contrast theory to the context of unknown brands purchase. The first group of hypotheses between environmental stimuli and perceived unknown brands quality were developed.

In the last section, the study reviews S-O-R theory and extends the S-O-R theory into the context of unknown brands purchase. S-O-R theory has linked the relationship among multiple extrinsic cues (Stimulus), perceived unknown brands quality (Organism) and purchase intention (response). The implementation of S-O-R theory not only established the

relationship between the organism factor- perceived unknown brands quality and response factor- purchase intention, but also reveals the potential mediation role of perceived unknown brands quality in the effect of environmental stimulus cues on consumers behavioural intention. On the basis of extension of S-O-R theory to the situation of unknown brands shopping, the second group of hypotheses between environmental stimuli and consumers' intention to purchase were developed, and finally, four extended hypotheses were developed depicting the mediating effect of perceived quality on the relationship between product cues and purchase intention. The research model of the study is then complete and finalised.

In light of the above discussions, there currently exists no empirical research concerning the explanation of the underlying process of consumers purchase decision making of unknown brands. In an attempt to address the significant gaps in the literature and contribute to current knowledge, the present study aims to examine the role of multiple product cues and perceived unknown brands quality in influencing consumers' behavioural intention towards unknown brands. Building on literature, a total of 13 (H1a,b,c,d; H2; H3a,b,c,d; H4a,b,c,d) hypotheses were developed in order address of the aim of this research.

CHAPTER 3: METHODOLOGY

3.1 CHAPTER OVERVIEW

This chapter presents the major aspects of the research methodology utilised to undertake this study. The chapter begins with a discussion of research methods. The second section depicts the sample population adopted in this study, followed by the discussion of sample size. Then data collection and the process of questionnaire development are delineated in section four and five, respectively. Instrument development is detailed in the sixth section. The seventh section presents the instrument validity and reliability, followed by discussion of common method variance. Then the data analysis technique employed for testing research hypotheses, conjoint analysis is described and discussed for the sound application of this technique and the interpretation of the results. The chapter concludes with a summary at the end.

3.2 RESEARCH METHODS

Researchers, as they prepare their studies, can choose quantitative, qualitative, or mixed methods. Qualitative method is primarily concerned with an in-depth exploration of the subject under study and focuses on finding and examining as many details as possible. Quantitative method, on the other hand, is an empirical method that gathers data in numeric form. It is chosen when the purpose of the research is to collect primary data, that is, data gathered and assembled specifically for the study, as opposed to secondary data (Babbie, 2007). Qualitative methods gather information mainly on the particular cases studied, and any more general conclusions are only assumptions. Quantitative methods, on the other hand, can be used to verify which of such assumptions are scientifically sound. In other words, the value of the quantitative method is its ability to test hypotheses, compare responses, and

produce generalizations. The ability to test hypotheses also allows the relationships in theories to be tested and validated (Babbie, 2007).

Previous research on product attribute cues has mainly used quantitative methods to investigate the influence of intrinsic and extrinsic cues on consumers' behavioural intention and perceived product quality (Bao et al., 2011, Lee & Lou, 2011, Miyazaki et al., 2005, Richardson et al., 1994, Teas & Agarwal, 2000, Veale & Quester, 2007). In line with previous studies, this study uses a survey to provide inputs to statistical tools to test the hypotheses. It is argued that experimental quantitative research is appropriate because it allows us to include a relatively large number of variables in a study and evaluate a product overall, in a holistic manner (Lee & Lou, 2011). Therefore, adopting such research method can thoroughly investigate consumer preference structures that reflect importance of attributes and features of the products (Chen et al., 2010). Furthermore, for an accurate estimate of the relationship between variables, a descriptive study usually needs a sample of hundreds or even thousands of subjects; an experiment, especially a cross-over, may need only tens of subjects (Hopkins, 2000). The estimate of the relationship is less likely to be biased if you have a high participation rate in a sample selected randomly from a population. In experiments, bias is also less likely if subjects are randomly assigned to treatments, and if subjects and researchers are blind to the identity of the treatments (Hopkins, 2000).

In all studies, subject characteristics can affect the relationships that are investigated. But their effect can be limited either by using a less heterogeneous sample of subjects or preferably by measuring the characteristics and including them in the analysis (Hopkins, 2000). In the present study, the researcher aims to explore the relationship between various extrinsic cues and perceived quality as well as purchase intention. By manipulating the levels

of product information cues and different combination of independent variables, the effect of each independent variable on the dependent variable and the interaction among independent variables can be observed. A descriptive quantitative study was not considered appropriate for this research because of the nature of the research questions. Similarity cues are not the same as traditional extrinsic product cues and the generation of similarity cue effects requires simultaneous presentation of multiple product information available for consumers to make comparison. This requirement was not able to be achieved by simply describing the product with words but rather, it requires consumers to see and feel the real product information provided and then, based on that, to make quality perception judgments. Therefore, in order to meet this requirement, an experimental quantitative study was employed instead of descriptive quantitative study.

Most experimental quantitative studies regarding consumer behaviour requires the use of survey to provide inputs to the usable experimental data. The survey questionnaire approach is the most common method of generating and collecting primary data and is considered to be the best method available to social scientists interested in collecting data for describing a population too large or too dispersed to observe directly (Babbie, 2007). This type of research method asks respondents to answer on a Likert-type scale along a continuum (Saris & Gallhofer, 2007). Items on the survey are assigned a value, for example, “strongly disagree” (value of 1) to “strongly agree” (value of 7). The advantages of a questionnaire are economy, speed, lack of interviewer bias, and the possibility of anonymity and privacy to encourage responses that are more candid. Survey results can be quantified to provide additional empirical support (Babbie, 2007).

In the present study, closed questions based on the experiment situations provided in a survey-based format were used to address research questions and hypotheses. This method was selected for the following reasons. First, this study intends to test the effect of multiple extrinsic cues in the context of unknown brands shopping by gathering a wide range of information from a large sample of population. Specifically it aims to explicate the relationship between perceived unknown brands quality and the intention of purchase, and identify the antecedents of perceived quality associated with unknown brands from a large sample of population of China's shoppers. Accordingly, a survey is appropriate to assist the experimental quantitative design to accomplish this goal of the study. Second, given the limited amount of data available from published sources, the use of a structured, self-reported survey based on the experimental condition provided for the purposes of data collection is both legitimate and dominant in consumer behaviour research (Ganesh et al., 2010, Hasan, 2010). It also enables data to be confidentially and inexpensively collected from a targeted but geographically diverse population, thereby making it suitable for collecting the data from the study sample required to test the proposed hypothesised models in the present study. Thirdly, a survey with closed questions allows for standardization of the data collected across individuals and provides a rapid turnaround time for data collection. Responses can be easily classified, thus making analysis very straightforward (Davis & Cosenza, 1895).

3.3 SAMPLE POPULATION

This study chose Chinese shoppers as the sample. China, with more than 1.34 billion people, is the most populous country in the world (N.B.S.C., 2011). Overall population density of the country is somewhat over 110 people per square kilometre (N.B.S.C., 2011), which is only about one-third that of Japan and less than many other countries in Asia and in Europe.

Regional variations, however, are dramatic as over 90 percent of the Chinese population live on less than 40 percent of the land.

China, like all other large states, is multi-ethnic. The Han people, however, form the largest majority, with about 94 percent of the population (N.B.S.C., 2011). While former Chinese governments traditionally acknowledged the Han, Manchu, Mongol, Turkish, and Tibetan ethnic groups, the current Chinese government officially recognises 56 ethnic groups, including the Han. The Han majority speak Chinese, but most of the minorities speak other languages, falling into 15 main language families (Ebrey, 1996).

Han Chinese is also marked by further linguistic diversity, in that the spoken forms of their different dialects vary as widely as the languages of Europe. All of the Han nonetheless use a common written form of Chinese and share common social organization, values, and cultural characteristics that are recognised as Chinese (Ebrey, 1996).

Due to the large size of the population and the regional density variations in China, it was hard for researchers to find a relatively smaller group of samples to represent the whole Chinese population. This was the reason a creative and unique way needs to be found in order to get the sample population the best representative of the whole population. There were no specific sex or age range requirements for this study as the study targets shoppers in China in general. However, the subjects under 18 years old are considered as “minors”, will not be taken into consideration because they may not be economically independent and do not represent the main population of general consumers in China.

3.4 DATA COLLECTION

In order to make the sample represent the general shoppers in the whole China, a creative data gathering location, Beijing Railway Station, was chosen. A self-completion questionnaire survey was administered and was handed to passengers hand-to-hand while they are waiting for their train. The method of surveying people in the Beijing Railway Station was appropriate for this study in terms of the quality and complexity of the data collected. The reasons can be specifically explained as follows: Firstly, Beijing railway station is the largest and busiest train station of the country and has very high customers traffic which can bring more opportunity to invite consumers to participate into our research. Secondly, the train routes of Beijing train station are connected to every single city around the country, therefore, the passengers are from all parts of China and a majority of China's population choose the train for their primary transportation. The samples taken from here can be used to as a good representative of general population in China. Thirdly, there are different types of train available for passengers, from the cheapest that everyone can afford to the dearest that can only be afforded by rich people. The trains are categorised into different classes by their speed and quality of services and are differentiated by the ticket prices from low to high. The highest prices for D-series train are even more expensive than the price of plane ticket of the same trip. Therefore, Beijing train station can be a proxy for all income levels. Fourthly, generally speaking, people in China who are waiting for the arrival or departure of their train may have more time and patience for our tests than people who are in the mall or on the street. Since people in China normally arrive at the train station hours before the departure of the train which allows them some free time.

The field experiment was conducted on a one-on-one, face-to-face basis considering the difficulties in gathering to attend laboratory experiment. Compared with e-mail surveys, face-

to-face surveys offer several significant advantages in terms of the amount and complexity of the data that can be collected. First of all, research has suggested that face-to-face surveys can be significantly longer than e-mail surveys (Holbrook et al., 2003). People allow a researcher to conduct face to face surveys for up to one hour, whereas respondents will typically not tolerate e-mail surveys that require more than 15 or 20 minutes of effort. The additional length allows researchers the opportunity to design more, longer, detailed and complicated questions (Doyle, 2009). The face-to-face survey was considered as the most appropriate method for this study. Secondly, the face-to-face survey could improve the response rate. Since it is much more difficult for people to refuse the invitation to participate in the face of a live human being, face-to-face surveys typically offer the highest response rates obtainable (over 90% in some cases) (Doyle, 2009) . Thirdly, from the respondent's point of view, face-to-face interviews could effectively address any questions or problems that arise (Doyle, 2009). If the respondent finds a question to be confusing or ambiguous, the researcher can immediately clarify it. Based on the above arguments, the sample drawing from Beijing Railway Station allows the capture of a good cross section of China's shoppers. Furthermore, the management of Beijing Railway Station grant the permission of this research to be carried out based on school of management letter, supervisors' recommendation, passport, Australian student visa, COE and a letter of non-criminal records from the police station of the researcher's hometown.

In order to randomise the selection process, the researcher selected every 5th passenger to overcome any selection bias that the researcher may bring to the research considering the researcher was acting as the main data collector. If the 5th person happened to be clearly a child, the researcher would choose to skip this child and approached the next person available, because children do not represent our desired sample features. After the collection, those

respondents who were over eighteen years old were also excluded from the final data analysis because eighteen is the normal age of Chinese teenagers finishing their nine years compulsory studies and starting to step into society, become a real citizen and a relatively financially independent consumer. People who were under 18 years old are also considered as “under aged” in Chinese society (N.B.S.C., 2011). However, other than excluding the under-aged respondents, age was not of major concern of this study because previous research had suggested that people (especially women) mostly lie about their age, bringing significant errors to the research (Wayne, 1997, Kingston, 2001). Data was collected at different times of the day (morning and afternoon) and during different days of the week (Monday through Saturday) to ensure a representative, non-biased sample. The data gathering process lasted for four weeks.

Moreover, for the purpose of this study one assumption was made regarding the sample and population. It assumes that each respondent answers only one survey. The chances of the same respondent filling in the questionnaire more than once were further reduced by the fact that the data collection ran in China for a short span of time, which reduced the chance of someone forgetting and filling out the survey instrument again.

It can be noted that many previous studies have used a sample drawn only from universities and colleges. The research took the view that the survey of just universities would exclude people who are illiterate and not brand conscious therefore such samples may not be representative of the total unknown brands shopping population. Besides, unknown brands are more popular and widely available in those economically under-developed regions where the illiterate may be higher than the developed regions where the universities normally locate. In addition, student characteristics may differ from the general supermarket shoppers’

characteristics. Most students in China, though over the age of 18, are still highly economically dependable on the families' financial support and therefore may be more cost-conscious in making their purchasing purchase decisions. Such characteristics may differentiate them from the population of general shoppers as a whole. They may also be more risk-taking, more innovative and more trusting than the elderly consumers. Accordingly, this study suggests that student samples limit the generalizability of the whole unknown brands shopping population. In addition, a few studies have suggested that education may act as a confounding variable in the process of consumer purchase decision making (Specht et al., 2013, Staelin, 1978, Dholakia, 1999) which further validate the argument that adopting student samples will generate less practical implications for business practitioners.

In addition to the student samples, a large number of studies have used the Internet as the data collection tool. Studies using email to announce their surveys sent an invitation email to a mailing list, with a URL link to the survey web site. Although e-mail-based web surveys have demonstrated superiority over postal surveys in terms of response speed and cost efficiency (Sheehan & McMillan, 1999, Weible & Wallace, 1998), its disadvantages should not be overlooked. The largest defect is its response rate. The response rates for e-mail-based web surveys may not match those of other survey methods (Cook et al., 2000, Couper, 2000), since individuals' overall attitudes toward the unsolicited e-mail survey may be unfavourable. The increase in unsolicited e-mail to Internet users and the ill will that generates among potential respondents can be viewed as an important reason for the lower response rates. This would also increase the difficulty for the researcher in planning to use e-mail surveys as it is likely that some type of unsolicited respondent contact will be necessary when using random sampling techniques. Studies show that as early as 2000, some Internet users receive more than 39 unsolicited e-mails per day at the workplace alone (NUA Internet Surveys, 2000a).

This information overload causes individuals to develop ways for dealing with e-mail, which includes using filtering software or developing heuristics such as deleting all unsolicited e-mail without opening it. Besides, potential survey participants may be concerned about the Internet security, such as the threat of viruses delivered from unsolicited e-mail (Sills & Song, 2002), which discourages potential participants from reading unsolicited e-mail survey. In addition to the low response rates of the e-mail survey, obtaining thousands of email addresses of online shoppers present difficulties. Also, issues such as changing Internet Service Provider and e-mail address, and holding of multiple e-mail addresses by a single individual have consequences for under-representation also indicate more drawbacks of adopting e-mail surveys (Bradley, 1999).

3.5 QUESTIONNAIRE DEVELOPMENT

A multi-stage process was employed for the development of the questionnaire that was used in the survey. Firstly, this study generated a pool of items that tapped the domain of each construct based on previous validated research. The literature on various perspectives of consumer behaviour, marketing and consumer psychology (Méndez et al., 2011, Van Horen & Pieters, 2012, Horen & Pieters, 2013, Mohammad et al., 2012, Idoko et al., 2013) was a guide to generate and refine the scales. Operationalizations of the variables included in this study and their measures will be delineated in detail in the next section.

The second stage of questionnaire development involved a back-to-back translation procedure. As the questionnaire was administered in Chinese, to ensure the validity of the translation, the translation procedure outlined by Wagner et al. (1987) was adopted. Firstly, all original items were translated into Chinese by one professional translator whose native

language was Chinese. Then, a second professional translator independently translated the items back to English. Further, the two translators confirmed the meaning of the Chinese version by comparing the two English versions.

The third stage of questionnaire development involved an expert evaluation. To ensure content validity and the appropriateness of items being investigated the purification processes by means of expert judgement addressed the relevance and completeness of scale items drawn from the literature. The study provided three senior academic experts from different universities who possessed expertise in the area of consumer behaviour with the construct definitions, corresponding items and a set of instructions for judging (Teo & Yu, 2005). The expert judges were asked to rate each item as, “not representative”, “somewhat representative”, or “very representative” to the construct definition (Subrahmanyam, 2004). After receiving the expert-judges’ feedback, decisions about which items to delete or keep were based on a three-stage procedure: a synthesis of the sumscore approach and the complete approach increasing in level of sophistication at each stage was adopted resulting in a draft set of 41 items.

In the final stage of questionnaire development, the study pretested the draft survey with 45 passengers found at Beijing Railway Station and asked them to complete the draft questionnaire. The 45 sample collected were excluded from the main sample used for hypotheses testing. Prior to the pretest, participants were made aware that the study had received ethics approval from the Tasmanian Social Sciences Human Research Ethics Committee. Upon completion, discussions were held with the respondent about the items in the questionnaire focusing on item comprehension, logic, and relevance. Specifically, the researcher asked these respondents whether they could think of more than one way to

interpret each item and to report these interpretations, and explain why they responded the way they did on each item. Having completed the in-depth interview with the test respondents, no serious problems with any of the items were reported. Finally, the two initial translators rechecked the final version and compiled the final Chinese questionnaire. The final items used in the questionnaire are listed in the Appendix.

3.6 MEASURES

A survey instrument for this study was developed based on both the use of existing validated questionnaire items and the extant literature providing theoretical definitions and domains of the other constructs of interest. The existing items with minor modifications in wording were adapted to increase their applicability to the Chinese context and the purposes of the study. For the items that were not previously verified, they were carefully designed based on the relevant literature, evaluated by field experts and pretested prior to the main study to ensure their validity. The measures of each variable in this study are discussed in this section.

Price similarity was measured using a four-item, seven-point Likert-type scale adopted from Cudmore (2000) with minor modifications to fit the context of this study, the items are:

- 1.1. I think the products A and B are priced similarly.
- 1.2 . I can hardly notice any differences between the prices of product A and B.
- 1.3. Paying price of A or paying price of B does not seem to have any difference to me.
- 1.4. I can afford paying price A as much as I can afford paying price B.

Drawing from the literature, the package similarity construct was operationalised into an nine-item, seven-point Likert-type scale adopted from existing studies (Beneke, 2010, Horen

& Pieters, 2013, Méndez et al., 2011, Miceli & Pieters, 2010, Silayoi & Speece, 2007, Van Horen & Pieters, 2012, Warlop & Alba, 2004) which included a wide range of packaging features covering the distinctive perceptual features (letters, colours, shapes), theme and meaning features. The items adopted are:

- 2.1. the theme of package between A & B looks very similar.
- 2.2. The colour of the package A & B looks very similar.
- 2.3. It is hard to tell the difference between visual characteristics of the packages of A & B.
- 2.4. The overall look of product A greatly resembles the overall look of product B.
- 2.5. The logo of product A & B looks very similar.
- 2.6. The brand name of product A & B sounds very similar.
- 2.7. The package sizes of products A & B looks very similar.
- 2.8. The package shapes of products A & B looks very similar.
- 2.9. The meanings of the package of products A & B have a lot in common.

The Third Party Organization endorsement was measured using a four item, seven-point Likert-type scale adopted from (Feng et al., 2008). The measures adopted are:

- 3.1. I believe the third party endorsement is trustworthy.
- 3.2. I believe the third party endorsement is honest.
- 3.3. I believe the third party endorsement is sincere.
- 3.4. I believe the third party endorsement ratings are fair.

The retailer image was operationalised as a multi-dimensional construct consisting of product assortment, product quality, price, value for money, store atmosphere, convenience and

customer service. The construct was measured using seven-item, seven-point Likert-type scale anchored by “1= strongly disagree” and “7= strongly agree”, adopted from existing literature (Ailawadi & Keller, 2004, Baker et al., 1994, Baker et al., 2002, Burt et al., 2007, Chang et al., 2011, Collins-Dodd & Lindley, 2003, Hu & Jasper, 2010). Product assortment refers to a consumer evaluation of the variety of product types in the store. Product quality refers to consumers’ subjective evaluation regarding the quality of the products. Price refers to consumers’ judgment of the cheapness of the products. Value for money refers to consumers’ judgment regarding the relation between the value and the price of the products. The store atmosphere refers to consumers’ feeling about the atmosphere of the interior decoration of the store, convenience refers to the accessibility of the physical store, and customer service refers to the perceived service quality from frontline employee working in the store.

To assess the perceived unknown brand quality, three items were adopted from the work of Dodds et al. (1991) with all items measured on a seven-point Likert scale. The items are: 1. The likelihood that the product would be reliable is very high. 2. This product should be of very good quality. 3. The likelihood of this product is dependable is very high. The purchase intention of unknown brands was measured using four item seven-point Likert scale adopted from the work of Mathur (1999), Knight and Kim (2007), and Liaw and Huang (2003). The four items are:

- 4.1. I would absolutely consider buying this brand.
- 4.2 I would definitely expect to buy this brand.
- 4.3. I believe it is worthwhile to buy this brand.
- 4.4. I would buy this brand/product in the future.

A summary of the measurement can be found in Appendix.

3.7 INSTRUMENT VALIDITY AND RELIABILITY

It is important to assess the instrument validity of reliability since it determines whether the research truly measures what it was intended to measure, or how truthful the research results are. To ensure research rigor, issue related to internal validity, content validity, construct validity and reliability need to be addressed. Without rigor, research is worthless, becomes fiction, and loses its utility.

According to Straub (1989), internal validity raises the question of whether the observed effects could have been caused by or correlated with a set of un-hypothesised and/or unmeasured variables. Internal validity also refers to the confidence that can be placed in the cause-and-effect relationship. Campbell et al. (1963) stated that internal validity is the basic minimum, without which any experiment is uninterpretable. Straub (1989) further emphasised the need for a good instrument to ensure internal validity. He noted that survey instrument design has two basic goals: to obtain information relevant to the purpose of study, and to collect this information with maximal reliability.

Content validity measures the degree to which the survey items represent the domain or universe of the trait or property being measured (Straub, 1989). To ensure content validity, previously used and validated measures were used for this research.

According to Straub (1989), the construct validity concerns the degree to which the survey items measure the construct they were designed to measure. Most importantly, the theory

underlying the construct to be measured must be considered (Harrington, 2008). Since most of the survey instruments developed for this study have borrowed the survey items from previously validated and tested instruments, to some extent, it can reduce such threat. Factor analyses (EFA and CFA) were adopted to test the construct validity.

Reliability of the instrument is considered as an important issue in ensuring the rigor of this research. As presented by Straub (1989), reliability is a statement about the stability of individual measures across replication from the same source of information. Straub (1989) further suggested that Cronbach's Alpha is a reliability coefficient that measures how well a set of items (or variables) measure a single unidimensional latent construct. When data has a multidimensional structure, Cronbach's Alpha will usually be low.

3.8 COMMON METHOD BIAS

As the study used self-report questionnaire for the purposes of experiment data input from the single informant, the potential for common method variance (also known as common method bias) may cause concern (Gupta & Kim, 2007, Bagozzi & Yi, 1991). Common method variance, as described by Fiske (1982), refers to variance that is attributable to the measurement method rather than to the constructs the measures represent. Such a variance may occur as a result of factors such as social desirability, halo effect and selective memory brought about by the self-reporting method, and it can threaten the internal validity of conclusions about the predictive relationships between measures (Campbell & Fiske, 1959b, Howard, 1994, Spector, 1994). As suggested by Kaynak (1997), a researcher therefore should plan how to overcome common method variance.

As confirmed in the literature, one of the techniques for minimizing common method variance is to carefully design the questionnaire and survey procedures. Specifically, assurances were given that the data provided by respondents would be held in strict confidence, the analysis would be done at the aggregate level, and no respondent would be identified individually. All of this information was stated clearly on the project information sheet provided to each informant. These procedures also were aimed at reducing respondents' evaluation apprehension, so making them less likely to edit their responses to be more socially desirable (Gupta & Kim, 2007). In addition, the measurement scales in the survey were arranged so that the measures of independent variables preceded the dependent variables and items on constructs which have the same scale poles were distributed in a non-sequential order (Salancik & Pfeffer, 1977).

A statistical technique widely used by scholars to determine the influence of common method variance is called Harman's one-factor (or single-factor) test (Podsakoff & Organ, 1986). Researchers using this technique traditionally load all variables in their study into an exploratory factor analysis (EFA), and examine the unrotated factor solution to determine the number of factors that are necessary to account for variance in the variables (Andersson & Bateman, 1997, Aulakh & Gencturk, 2000, Organ & Greene, 1981). It is assumed that if only one factor emerges from the unrotated factor solution as accounting for most of the variance observed in the data, it is likely that common method variance is the primary source (Podsakoff & Organ, 1986). As an alternative to EFA, confirmatory factor analysis (CFA) can be used when implementing Harman's single-factor test (Podsakoff & Organ, 1986). Specifically, in the CFA approach, all of the manifested items are modelled as the indicators of a single factor that represents method effects. Common method bias are assumed to be substantial if the single-factor model fits the data significantly better than the proposed model

with many factors (Podsakoff & Organ, 1986). In the present study, Harman's one-factor test was performed through both EFA and CFA in order to detect the severity of common method variance in the current data.

3.9 DATA ANALYSIS TECHNIQUES: CONJOINT ANALYSIS-FACTORIAL DESIGN

This study used conjoint analysis as a main method to test the hypothesised relationships. Conjoint analysis, originated in mathematical psychology, is a multivariate technique that uses consumers' subjective view of quality to determine the importance consumers place on tested product attributes (Anderson et al., 1998). In the analysis, the respondents' rating of the "quality" is transformed into utility values representing each product attribute (and level) tested. As a result, the respective influences of individual product attributes can be quantified and each product profile tested can obtain a comparable value (quality) score. The methodology is based on the simple premise that consumers evaluate a product overall, in a holistic manner, by combining the separate amounts of utility provided by each attribute level. Today, conjoint analysis is widely used in many of the social sciences and applied sciences including marketing, product management, operations research and consumer research, where respondents are presented with product descriptions generated according to a factorial design of product attributes (Wittink et al., 1994, Green & Srinivasan, 1990, Green & Srinivasan, 1978, Carroll & Green, 1995). The early stages of conjoint experimentation usually involve the investigation of a large number of potential factors to discover the "vital few" factors. Normally factorial experiments are used during these stages to quickly filter out unwanted effects so that attention can then be focused on the important ones. A full factorial experiment is an experiment whose design consists of two or more factors, each with discrete possible

values or “levels”, and whose experimental units take on all possible combinations of these levels across all such factors. A full factorial design may sometime be referred as fully crossed design. Such an experiment allows studying the effect of each factor on the response variable, as well as the effects of interactions between factors on the response variable. Conjoint analysis requires research participants to make a series of trade-offs. Analysis of these trade-offs will reveal the relative importance of component attributes. To improve the predictive ability of this analysis, research participants should be grouped into similar segments based on objectives, values and/or other factors. The exercise can be administered to survey respondents in a number of different ways. Traditionally it is administered as a ranking exercise and sometimes as a rating exercise where the respondent awards each trade-off scenario a score indicating appeal. The main objective of this study is to understand how consumers make trade-offs while facing various components’ attributes of unknown brands. Based on the above analysis, it is believed that conjoint analysis provides a rigorous way of analysing the vertical relationships between cues and expected quality and purchase intention.

3.9.1 Pre-tests

Two pre-tests were conducted before the operations of the main experiment. The purpose of pre-test one was to check whether the product categories chosen are suitable for further experiment operation. Because the study focused on the effect of “unknown brands”, the consumers participated in the experiment should be able to distinguish the national brands and the unknown brands in the chosen product categories. There is no point of choosing a product category which consumers has little knowledge of and cannot distinguish most of the brands. In such situation, no anchor brands are available and therefore the experiment conditions cannot be met. Furthermore, based on literature, it should also be noted that

consumers should be able to perceive the quality of national brands significantly higher than unknown brands if they understand the products well in a certain category. Finally, consumers need to be familiar with the products in the chosen category as inaccurate responses will be given and confusions will arise if consumers do not have basic understandings of the features and brands in the chosen category.

In pre-test one, six different soft drink brands were chosen which consist of two as national brands (Wahaha, Coca Cola), two as unknown fictitious brands (Jin Niu, Hong Quan) that were made specifically for experimental purposes and another two as potential unknown brands (Thirsty Cola, Excitement) that were real brands in the market but had limited marketing exposure to consumers. The use of fictitious unknown brand names was to observe the possibilities of consumers' having certain knowledge of the potential unknown brands prior to study and whether this prior knowledge will have any effects on the experimental results. Such a potential effect can be observed by comparing consumers' responses to the two different groups of stimuli chosen. Three items were developed based on the previous literature to test the consumers' familiarity with the brand, perceived brand quality and the intention of purchase.

A total sample of 111 was obtained for pre-test one. After the reviewing of the data, 5 invalid responses were taken out due to missing value which gives the pre-test 106 valid responses. Because this pre-test aimed at comparing two groups: famous versus unknown, paired t test was used to compare the mean scores of same group of people on the average number of score response of unknown brands and national brands. The basic idea of t test was to see whether the difference between two groups was larger than would be expected by random error alone (Mitchell & Jolley, 2004). In each product category, one famous brand and one

unknown brand were chosen for comparison. In the t test, two types of figures were compared: 1. the means of individual item scores. 2. The means of average scores of all three items. Statistical significance must be met on all three dimensions tested. In a t test, to achieve such significance, p value must be smaller than 0.05 ($p < 0.05$). Then a further decision was made to see if the product category chosen was eligible for further testing.

The results is shown in Table 3.1 and 3.2

Table 3.1: Descriptive Data for Pre-test One

	Perceived quality		Brand familiarity		Purchase intention	
	M	SD	M	SD	M	SD
Famous brand 1	5.99	1.14	6.0	1.00	6.19	0.79
Famous brand 2	6.11	0.87	6.1	0.82	6.27	0.75
Unknown brand 1	1.64	0.95	1.65	0.83	1.72	0.88
Unknown brand 2	1.68	0.71	1.70	0.92	1.65	0.63
Fictitious brand 1	1.70	0.69	1.71	0.75	1.63	0.68
Fictitious brand 2	1.60	0.61	1.68	0.73	1.64	0.64

Table 3.2: T test Results for Pre-test One

	Perceived quality			Brand Familiarity			Purchase intention		
	<i>df</i>	<i>t</i>	<i>p</i> [*]	<i>df</i>	<i>t</i>	<i>p</i> [*]	<i>df</i>	<i>t</i>	<i>p</i> [*]
Famous brands	106	1.00	.32	106	.66	.51	106	.90	.37
Unknown brands	106	.493	.62	106	1.37	.19	106	.87	.39
Fictitious brands	106	1.17	.25	106	.21	.83	106	.22	.83
Famous vs. Unknown	106	37.7	.00 [*]	106	40.1	.00 [*]	106	51.2	.00 [*]
Famous vs. Fictitious	106	49.8	.00 [*]	106	48.7	.00 [*]	106	57.6	.00 [*]
Unknown vs. Fictitious	106	.125	.90	106	.797	.427	106	.601	.55

Note: * $p < 0.05$

T tests have suggested: 1. People are more familiar with the national brands ($P < 0.05$) than that of unknown brands or fictitious brands. 2. The national brands were judged to be of higher perceived quality than both the real unknown brands and the unknown fictitious brands. 3. Consumers showed higher intention of purchasing national brands rather than the unknown brands. But the purchase intention measures did not reveal significant differences between two national brands. 4. There were no significant differences between the means of fictitious unknown brands and the real unknown brands in the market. This indicates that both types of unknown brands can be used as stimuli for further testing and the soft drinks category meets the requirement of experiment mentioned before.

The purpose of pre-test 2 was to check whether the retailer image and package similarity were manipulated at significantly different levels for the conjoint analysis. The price similarity cue can be simply manipulated as high or low. But the retailer image and package

similarity are perceptions of consumers that are not directly perceived through the senses. Therefore, making sure the manipulation is effective is a prerequisite for valid experimental results. The final objective of pre-test two was to explore two retailers with different degree (high/low) of image and two packages with different (high/low) degree of similarity towards famous brands.

In pre-test 2, based on the investigation of supermarket chains operating in China, an initial pool of six retailer names were used for this experiment. The choice of store image stimuli was largely based on the understanding that these selected stores are generally familiar to the target group of respondents and the stores' distinct brand positioning in terms of products and service to the consumers, which by and large, representing different level of status. The variables were measured by a four-item, seven point Likert type measure. The consumers were asked to provide their opinions on their perceptions of retailer service, the products offering, store atmosphere and consumers' retailer brand attitude (Hopkins & Alford, 2001, Reardon et al., 1995, Manolis et al., 1994, Hildebrandt, 1988). After the data was collected, the average scores of the four items were taken to reflect the overall perceptions of consumers towards certain retailer. As only two retailers were needed for the main experiment, it was convenient to choose from the two retailers which exhibit extremes ratings (the one with the highest rating and the one with the lowest rating) to ensure the existence of significant differences of the measure. Using levels of independent variables was also considered an effective way to avoid making type II errors (Mitchell & Jolley, 2004). The results indicated that BHG Market Place exhibited the highest mean score (6.10) across the four items tested while Merry-Mart China recorded the lowest average mean score (3.29). Analysis of the manipulation check mean scores suggested that the manipulation of retailer image was perceived as intended. A one-way ANOVA was used to assess the impact of the

two levels on the retailer image manipulation check. For both products, the contrast estimates between each pair of means for the two retailer image levels were all significant ($p < .05$).

In order to check whether the package similarity was manipulated effectively in the experiment, one real package of unknown brand and one fictitious brand's package developed for experimental purposes were used. The respondents were asked to rate the similarity of two packages comparing to the package of a national brand in the market based on a two-item, seven point Likert type measure adopted from Cudmore (2000). The items are 1. The package presented by A looks a lot like the package presented by B. 2. The overall look of product A package greatly resembles the product B package. Research supports the use of coloured pictures to represent actual packages and so no detrimental effects on similarity ratings were expected (Bijmolt et al., 1998). Note that the respondents were asked to ignore the brand names, size of pictures and ingredients information for the purpose of reducing the chance of confounding sources of information or cues. Analysis of the manipulation check mean scores suggested that the manipulation of package similarity was perceived as intended. A one-way ANOVA was used to assess the impact of the two levels on the package similarity manipulation check. For both products, the contrast estimates between each pair of means for the two package similarity levels were all significant ($p < .05$).

3.9.2 Main Study

In the main study, soft drinks category was continued to be used for experiment, for several reasons. Firstly, comparing to those products that are sold in multiple environments, soft drinks were mostly sold at supermarkets which has minimised the potential environmental influence to the study. Secondly, due to the nature of the grocery products, consumers are less

likely to be involved in a complex decision making process prior to purchase therefore consumers are more likely to make purchase decisions quickly relying on product attribute cues heavily at the point of purchasing (Cudmore, 2000). Third, according to observation of the researcher and interviews with supermarket management, soft drinks occupies large shelf space in the China's supermarkets with simultaneous presentation of both national brands and unknown brands and also imitation behaviour exists to a very high extent in the soft drinks section. Furthermore, soft drinks category is also well known by consumer groups which indicates that consumers are more likely to evaluate the quality of soft drinks accurately based on their understanding of certain product features. Finally, there is no gender bias with soft drinks category as males and females are equally familiar to the category and are both frequent buyers of the products (unlike some other categories such as laundry powder while males are unlikely to have a lot of knowledge of in general).

Conjoint analysis using factorial design is adopted to examine consumers' trade-off among different product attributes when evaluating multiple product attribute cues simultaneously. The main experiment consisted of four manipulated factors: two levels of third party organization endorsement (low, high), two levels of retailer image (low, high), two levels of price similarity (low, high), and two levels of package similarity (low, high). This indicates a $2 \times 2 \times 2 \times 2$ factorial experiment between subjects design. If price similarity is set as variable A, package similarity as variable B, third party organizational endorsement as variable C and store image as variable D. This factorial design were able to test four main effects: A, B, C and D; six two-factor interaction effects AB, AC, AD, BC, BD, CD; and four three-factor interaction effect ABC, ABD, ACD, BCD and one four-factor interaction effect ABCD. The total experiment requires 16 runs. Each treatment requires randomly assigned samples with the numbers exceeds minimum sample size divided by total treatment equals minimum 32

samples per cell. Therefore, 16 different types of questionnaires representing 16 treatments were handed out randomly to the sample pool to ensure the participants were randomly assigned to one of the 16 cells with no bias. Previous research highlighted the importance of random assignment of samples for its ability to rule out the effects of variables unrelated to the treatment manipulation in the experiment (Mitchell & Jolley, 2004). More specifically, random assignment of the samples ensure variables such as gender and personality could not be confused for a treatment effect and that a statistically significant difference between the control group and the experimental group will not be created due to the groups being different before the treatment was introduced. Therefore, random assignment is a key point in this study to make sure that the experiment was not biased either by the researcher or the participants.

During the experiment, participants were asked to make comparisons between famous brands and unknown brands. Description of product information regarding price, third party organization endorsement and store image were given to each tested subject and the packages were shown by way of coloured pictures at the top of each questionnaire. Each type of questionnaire contains the picture of two brands, with the famous brands always on the left and the paired package pictures on the right which were made to appear equal in all dimensions. Any excess information was deleted or held constant in any treatment group.

Before the experiment, the participants were informed that the participation to this study was voluntary and they are free to withdraw from the questionnaire at any stage without any effects now or in the future. They were also advised to read the information sheet carefully before filling out the questionnaire. In the experiment, the participants were also asked to imagine that they were in a supermarket purchasing groceries while the unknown brands and

famous brands were available and displayed simultaneously on the shelf. The package and the price of the famous brand within the product category were also provided to the participants to be compared with the unknown brand. After reading the description, participants were required to complete the randomly assigned questionnaire. The entire task took about 8-10 minutes to complete. Further, all subjects were observed during the experiment and any questions from the respondents were answered directly by the researcher. Upon completion subjects were thanked and asked not to discuss the experiment with anyone to avoid leaking experiment information and contaminating potential respondents.

Between-subject design were adopted instead of within subject designs in the experiment because the use of within-subjects designs has been considered somewhat artifactual because respondents who answer repeated measures across several levels of variable may guess the true intent of the research and respond accordingly (Sawyer, 1975). In addition, within-subjects designs are more likely to produce larger effects than between-subjects designs because the former control for individual difference, which reduces error variance (Vöckner & Hofmann, 2007).

Data collected were screened before being entered into the computer in order to ensure all identifiable information from participants was removed. The paper data was then securely stored and the electronic data were entered into Minitab 15.0 and SPSS 21.0 for data analysis.

3.10 CHAPTER SUMMARY

This chapter has described the methodological approach used to conduct the present study. A four-stage process was employed for the development of the questionnaire. The data collection was conducted at the Beijing Railway station based on a face-to-face survey. The survey instrument used to collect experimental data was developed based on both published academic work and the broader extant literature. The major issues pertaining to reliability and validity in the design of the study, as well as comments on the appropriateness and soundness of the methods utilised have been discussed in this chapter. A discussion of the analytical technique employed (conjoint analysis) has highlighted the important considerations in the interpretation of results from such an analytical technique. The research ethics and the safety of the experimental data were also addressed.

CHAPTER 4: DATA ANALYSIS AND HYPOTHESIS TESTING

4.1 INTRODUCTION

This chapter consists of 10 sections and is structured as follows. The chapter begins with data cleaning and screening to check for incompleteness and inconsistencies, followed by an overview of the respondent profile. Then, preliminary analysis of the data was conducted via correlation analysis, exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and reliability estimates. Following this, results of the preliminary analysis of the items measuring each multi-item constructs were presented. The purpose of the preliminary analysis is to identify a set of indicators that represents each multi-item construct in the overall measurement model. Next, the convergent and discriminant validity were examined, followed by the assessment of common method bias. Using a two-stage approach as recommended by Gerbing and Anderson (1988), the overall measurement model was first confirmed and then the basic structural model for the entire sample (n=512) and the structural model for controlling for age, gender, income and education level were assessed, respectively. Factorial ANOVA was performed between proposed independent variables- price similarity, package similarity, third party organization endorsement, retailer image and proposed dependent variables- perceived quality and purchase intention, to test the causal research hypotheses of this study (H1a, H1b, H1c, H1d, H2). Mediation testing was conducted in order to address H3a, H3b, H3c and H3d which proposed that perceived quality mediates the effect of extrinsic product cues on consumers' purchase intention. Lastly, the chapter concludes with a summary of the findings associated with the tested hypotheses.

4.2 PRE-ANALYSIS DATA SCREENING AND CLEANING

In scientific research, errors occur in spite of careful study design, conduct, and implementation of error-prevention strategies. Data cleaning is intended to identify and correct these errors or at least to minimise their impact on study results. Data cleaning means that the raw data obtained from the questionnaires need to undergo a series of preliminary preparation before they can be analysed by statistical techniques (Kumar et al., 2002). From a statistical point of view, the main purpose of performing data screening and cleaning is to check incompleteness and inconsistencies in order to ensure accuracy and precision of the data. Missing responses represent values of a variable that are left un-responded, either because respondents provided ambiguous answers or their answers were not properly recorded. An examination of basic descriptive statistics and frequency distributions were conducted to screen the data set obtained for the study. For those cases where respondents selected the same response number for all or a majority of the questions were removed from the data set since this indicated the respondents did not respond to the questions in a serious manner. Example of this type includes one respondent answered all questions with number 1, another respondent answered all questions in section 1 with number “7”, questions in section 2 with number “6”. As a result, 3 cases with the problem of inconsistencies were removed from the original data set obtained. Furthermore, there were also two cases identified as not appropriate for further use because the respondents answered all questions by the sequence of “1-7” then “7-1”.

In terms of missing value, as suggested by Sekaran (2000), the questionnaire should not be included in the study if over 25 per cent of the items in the survey were left unanswered. Therefore, 13 cases were discarded due to the omission of more than a quarter of the response

value from the questionnaire. However, there were 7 cases containing a small number of missing responses randomly distributed throughout the surveys. According to the suggestion of previous literature (Hairs et al., 1998, Kamakura & Wedel, 2000, Myrtveit et al., 2001), these cases were examined to determine whether certain patterns existed in the missing value. According to the recommendation by Hairs et al. (1998), these cases were examined to determine whether the loss was completed at random or certain pattern existed because of respondents' refusal or inability to respond. As summarised by Allison (2003), the missing value could have been resulted from a few possible conditions. First of all, the respondents could be reluctant to respond to such things as education, income, interest in the subject, geographic location, etc. In this regard, selective loss of data is much more problematic than random loss. Secondly, the missing value was due to error by design, questions not asked or not applicable. Sometimes data are missing because the researcher deliberately did not ask the question of that particular respondent. For example, the question "when is the last time you have purchased unfamiliar brands? A. A day ago. B. Several days ago. C. A month ago. D. A year ago" could not be answered by someone who has never experienced shopping for unfamiliar brands. Moreover, the researcher should also check whether the missing values mainly exist in independent variables or dependant variables to observe possible pattern. After careful examination, it was found that there were neither any patterns existed in the missing data nor any missing data value was due to any reasons identified above, therefore, an imputation method commonly used within survey research (Jacob & Cohen, 1975; Newman, 2003; Patrick, 2005;) whereby the missing value is estimated based on values of other variables, was the remedy chosen. Missing data and missing values were replaced via linear interpolation using SPSS, which allows a total number of 512 cases for the final study.

4.3 SAMPLE DESCRIPTION

The demographic information of the entire sample (n=512) are presented in Table 4.1. In the entire sample, 47.9% of participants were males, and 52.1% were females. This result is similar with NBSC (National bureau of statistics of China) demographic report in 2011 which shows the demonstration that the sample is a good representation of the population (N.B.S.C., 2011). Respondent groups aged between 18 and 25 years old and aged between 26 and 35 years old accounted for 21.5% and 41.6% of the sample, respectively, followed by the age groups of 36-49 years old at 29.1%. These three groups collectively contributed approximately 92% to the overall sample in terms of age. While people over 50 years old were the single smallest group accounting for 7.8% of all respondents.

Furthermore, with regard to the highest level of education achieved by respondents, 34% were senior high school qualified, 53.1% university qualified, 16.2% completed master or PH.D., 12.9% has less than junior high school degree. The household income levels varied with 3.3% of the sample earning under ¥1500, 12.1% earning between ¥1501 and ¥4500, 38.3% earning between ¥4501 and ¥9000, 46.1% having ¥9000 or above per month.

Table 4.1: Demographic Profile of the Respondents (N=512)

Variable	Category	Frequency	Sample Percentage
Gender	Male	245	47.9
	Female	267	52.1
Age (in Years)	18-25	110	21.5
	26-35	213	41.6
	36-49	149	29.1
	>50	40	7.8
Education	Senior high school	174	34
	University	189	36.9
	Master and Ph.D	83	16.2
	Other	66	12.9
Monthly Household income	< ¥1500	17	3.3
	¥1501 - ¥4500	62	12.1
	¥4501 - ¥9000	196	38.3
	>¥9000	237	46.3

4.4 PRELIMINARY DATA ANALYSIS

4.4.1 Overview of Preliminary Data Analysis

In this section, measurement quality is assessed in terms of reliability, convergent validity, and discriminant validity using confirmatory factor analysis (CFA). This study followed a two-step approach suggested by Anderson and Gerbing (1988). In a two-step approach, the measurement model is evaluated separately from the full structural model prior to simultaneous estimation of the measurement and structural models. This enables comprehensive assessment of construct validity (Bentler, 1978). Campbell and Fiske (1959a)

also suggested that the measurement model allows confirmatory assessment of convergent and discriminant validity.

Following Anderson and Gerbing (1988), the measurement model is first evaluated and assessed for convergent and discriminant validity. After comprehensive assessment of the measurement model, it is respecified to purify measures and to reduce the potential for interpretational confounding. Anderson and Gerbing (1988) suggested four different ways to respecify the measurement which were, relate the indicator to a different factor, delete the indicator from the model, relate the indicator to multiple factors, or use correlated measurement errors. They further suggested that the first two methods for respecification may preserve unidimensional measurement and so are more preferable and lastly, two methods can be justified only when they are specified a priori, otherwise, they may capitalise on chance and lose interpretability and theoretical meaningfulness (Fornell & Larcker, 1981, Gerbing & Anderson, 1988).

In this study, the second method for respecification was used. Potentially problematic indicators were deleted and respecified by the following considerations, items were considered for respecification if they: (1) displayed a significantly lower item reliability than that of the other items that are posited to measure the same construct, as indicated in the squared multiple correlations; (2) showed that path coefficients for the expected construct are insignificant; (3) showed large residuals with other indicators; (4) shared large variance with other indicators, but due to error and thus unexplainable variance, as indicated in the modification indices; or (5) shared common variance with indicators posited on some other constructs, as indicated by large modification indices for λ . The respecification decision was

made based on both statistically and content consideration as suggested by Anderson and Gerbing (1988).

Also, before conducting any further preliminary analysis, each variable was visually inspected for normality, skew and kurtosis, and the presence of outliers using SPSS 21.0. Histograms were deemed appropriate at this stage to provide the best “overall” picture of each variable across a small range of scores (1 to 7). In addition to visual inspection, each variable was analysed via tests of skewness and kurtosis. Overall the data did not appear to be problematic, with all statistics falling within acceptable ranges. For example, skew and kurtosis values were between -2 and +2, indicating that the frequency distributions were considered normal. Similarly, the data was inspected for the presence of outliers and none were detected. For example, scores did not fall outside the range of 3 to 4 standard deviations which is the recommended criteria for detecting outliers for large samples (Hairs et al., 1998). The means, standard deviations, skew and kurtosis values for each of the variables appear in Table 4.2.

Having inspecting the data for anomalies in normality, the next step was to analyse the data to access the factor structures and internal consistency of the items using factor analysis.

Table 4.2: Means, Standard Deviations, Skew and Kurtosis for Variables.

Variables	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Gender	1.55	.498	-.219	.111	-1.960	.222
Age	2.22	.869	.237	.111	-.655	.222
Education	2.42	.908	.065	.111	-.788	.222
Income	3.26	.803	-.898	.111	.219	.222
Price similarity (PRS)	4.33	1.992	-.101	.111	-1.608	.222
Package similarity (PAS)	4.33	2.007	-.139	.111	-1.735	.222
Third party organization endorsement (TPO)	4.08	1.909	-.055	.111	-1.611	.222
Retailer image (RI)	4.40	1.659	.169	.111	-1.487	.222
Perceived quality (PQ)	3.99	1.365	-.232	.111	-.891	.222
Purchase intention (PI)	3.86	1.592	-.136	.111	-1.236	.222
Valid N (listwise)						

4.4.2 Preliminary Analysis Step One: Exploratory Analysis

Factor analysis allows the researcher to identify and separate dimensions of the structure. Also it determines the extent of which each variable is explained by each dimension. Once each dimension is determined, factor analysis allows synthesizing and reducing the amount of data used. By synthesizing the data, factor analysis extracts dimensions that describe the characteristics of the original data. The dimensions generated, can replace the original variables if factor analysis is well-executed (Armstrong & Soelberg, 1968). In factor analysis, all variables relate to one another to form factors that maximise the explanation of all variables identifying the structures existing between them.

In order to assess unidimensionality of each latent construct in the model, an exploratory factor analysis (EFA) was conducted (Dillon et al., 1987). An exploratory factor analysis (EFA) for each construct yielded a single underlying factor for each construct. Firstly, exploratory factor analysis (EFA) is designed for the situation where the relationships between the observed and latent variables are not predetermined, thus warranting an exploratory approach to data analysis in order to discover the underlying factors. While EFA is the most conventional approach evident by its extensive use in marketing and consumer behaviour research (Chenet et al., 2000, O'Cass & Grace, 2001), this approach has certain limitations. Firstly, and most importantly, EFA assigns items to factors purely on the basis of which factor they load substantially, therefore, it is possible for an item to have a significant loading on more than one factor which, in turn, affects the identity or distinctiveness of the factor (Sureshchandar et al., 2001). Furthermore, EFA items load onto factors on a purely statistical, rather than theoretical, basis thereby affecting the valid identity of the factors. Secondly, as noted by Chandon et al. (1997), an explicit test of unidimensionality is not provided by EFA as each factor is defined as a weighted sum of all the available items in that dimension.

As recommended by Comrey (1978), pre-analysis of the suitability of the data for factor analysis is essential, in that the data matrix must be inspected to ensure that a sufficient number of significant correlations exist. Hairs et al. (1998) points out that the data matrix can be initially tested via measures such as the Kaiser-Meyer Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity. KMO compares the size of the observed correlation coefficients with the magnitude of the partial correlation coefficients and is calculated as a value between 0 and 1. A value close to 1 indicates a large number of

interrelations among the variables. Similarly, the Bartlett's Test for Sphericity was used to test for statistical probability that the correlation matrix had significant correlations among at least some of the variables computed and was indicated by a significance level less than .05 (Hairs et al., 1998).

The next stage of step one involved a closer inspection of the bivariate correlations contained within the matrix. At this point, as indicated by Hairs et al. (1998), items not exhibiting a substantial number of correlations greater than .30 were removed as they were not considered strong enough to be appropriate for factor analysis. Data was then considered sufficiently robust for conducting EFA.

Following data verification for EFA, the next stage of step one involved conducting EFA to determine the factor structures of the data and loadings of items. In this regard, the empirical assessment of construct validity was evaluated using contemporary analytical guidelines recommended by Anderson and Gerbing (1988), Hairs et al. (1998), and O'Leary-Kelly and J Vokurka (1998) through the examination of factor structures, unidimensionality and internal consistency. EFA was conducted via principal-components factor analysis using varimax rotation, chosen on the basis that all factors were expected to be unidimensional. At this point, a similar procedure to Shi and Wright (2001) was followed whereby factors with eigenvalues greater than 1 were identified and items with factor loadings less than .50 were deleted. In addition, any items exhibiting cross-loadings greater than .04 were also removed from the analysis. The data was then ready for the final issue, that being reliability analysis.

The final stage of step one involved conducting reliability analysis to determine if the scale has ability to provide consistent results. Reliability tests include test-retest method,

equivalent forms, split-halves method and internal consistency method. Of these methods, the internal consistency method requires only one administration of the instrument and is operationalised as the degree of inter-correlations among the items that constitute a scale (Nunnally & Bernstein, 1978), estimated via the reliability coefficient called Cronbach's alpha. While Sureshchandar et al. (2001) argue that internal consistency is established if the alpha value is greater than .70, some advocate that the alpha value greater than .60 may be sufficient depending on the number of the items in the scale or in the case of exploratory research (Hairs et al., 1998). Therefore, at this stage, all scales were tested using Cronbach's alpha in order to determine if they were, in fact, reliable measures of the constructs. Items meeting the alpha criteria of .70 (Sureshchandar et al., 2001) were, at this point, considered reliable indicators of the constructs and further analysis was initiated.

4.4.3 Results of Exploratory Analysis

This study includes four independent variables and two dependent variables, which are all latent constructs in the proposed model. Because latent constructs cannot be measured directly, multiple items were used to measure the four latent constructs. Descriptive statistics for six latent constructs are also presented in this section.

Independent variables

The price similarity construct was measured using four items (PRS1 to PRS 4) adopted from Cudmore (2000). The preliminary data analysis process using EFA and CFA was employed as a screening mechanism for data measured by these item (refer Appendix). Evaluation of the correlation matrix through the KMO and Bartlett's Test resulted in a high KMO statistic

(0.855) and a significant probability level ($p < 0.001$) for the Bartlett's test. These results indicate that sufficient correlations were found within the correlation matrix for factor analysis to proceed. In addition, bivariate correlations were inspected and all coefficients fell within the acceptable range for factor analysis of 0.30 and above. Item-total-correlation was less than 0.95. EFA was then conducted which produced a single factor structure with strong item loading ranging from 0.94 to 0.95 and the variance explained was 85 per cent. Cronbach's alpha was calculated to assess the internal consistency of the three items and was found to be highly reliable ($\alpha = 0.94$). At this point, as all the items met the criteria of preliminary analysis, they were retained for further CFA analysis. Descriptive statistics and EFA results of the three indicators for price similarity are presented in Table 4.3 and Table 4.4.

Nine items (PAS1 to PAS9) were used to measure the package similarity construct. These were subjected to exploratory analysis process shown in Table 4.3. Evaluation of the correlation matrix through the KMO and Bartlett's Tests results in a high KMO statistic (0.95) and a significant probability level ($p < 0.001$) for the Bartlett's test. These results indicate that sufficient correlations were found within the correlation matrix for factor analysis to proceed. In addition, bivariate correlations were inspected and all coefficients were above 0.30 with item-total-correlation less than 0.95. EFA was then conducted which produced a single factor structure with strong item loadings ranging from 0.91 to 0.96 and the variance explained was 69.40 per cent. Cronbach's alpha of 0.94 was computed indicating very good reliability of the scale. At this point, as all the items met the criteria for exploratory analysis, they were retained for further CFA analysis.

The third party organization endorsement construct was measured using four items (TPO1 to TPO4). These were subjected to the preliminary data screening and analysis process by conducting EFA and CFA. Evaluation of the correlation matrix through the KMO and Bartlett's Test resulted in a high KMO statistic (0.872) and a significant probability level ($p < 0.001$) for the Bartlett's test. These results indicate that sufficient correlations were found within the correlation matrix for factor analysis to proceed. In addition, bivariate correlations were inspected and all coefficients appeared to be significant. Total-item-correlation fell between the range of 0.30 to 0.95 indicating there were no over fitting issue. EFA was then conducted which produced a single factor structure with strong item loadings from 0.95 to 0.97 and the variance explained was 91.46%. Cronbach's alpha of 0.74 was computed indicating good reliability of the scale. Therefore, as all item met criteria of exploratory analysis, they were retained for CFA analysis.

Six items (R1 to R6) representing six different facets of retailer, were used to measure retailer image. Reliability of items was calculated and item 1, 2, 3, 5, 6 were found to be highly reliable (all Cronbach's $\alpha > 0.90$). SPSS indicates the reliability statistics for the 6-factor model < 0.70 which was questionable. Item 4 showed that if deleted, Cronbach's alpha would be increased to 0.96 level. Therefore, after consideration, item 4 were taken out of the model and reliability test of the 5 factor model exceeded 0.96. Evaluation of the correlation matrix through the KMO and Bartlett's Test resulted in a high KMO statistic (0.92) and a significant probability level ($p < 0.001$). These results indicate that sufficient correlations were found within the correlation matrix for factor analysis to proceed. In addition, bivariate correlations were inspected and all coefficients were above 0.30 with total item correlation below 0.95. EFA was then conducted which produced a single factor structure with strong item loadings

ranging from 0.88 to 0.93 and the variance explained was 87 per cent. All retained items met the criteria of exploratory analysis and were subject to the confirmatory analysis.

Dependent variables

For dependent variables, three items (PQ1 to PQ3) were used to measure the consumer's perceived quality construct. Evaluation of the correlation matrix through the KMO and Bartlett's Test resulted in a high KMO statistic (0.702) and a significant probability level ($p < 0.001$) for the Bartlett's test. These results indicate that sufficient correlations were found within the correlation matrix for factor analysis to proceed. In addition, bivariate correlations were inspected and all coefficients exceed 0.30 level with total item correlation below 0.95. EFA was then conducted which produced a single factor structure with strong item loading ranging from 0.84 to 0.93 and the variance explained was 75.89 per cent. Cronbach's alpha of 0.84 indicated good reliability of the scale. At this point, as all the items met the criteria of exploratory analysis, they were all retained for further CFA analysis.

The purchase intention construct was measured using four items (PI1 to PI4). These were subjected to the preliminary data analysis process containing EFA and CFA, the results of which are presented in Table 4.3 and Table 4.4. Evaluation of the correlation matrix through the KMO and Bartlett's Test resulted in a high KMO statistic (0.874) and a significant probability level ($p < 0.001$) for the Bartlett's test. These results indicate that sufficient correlations were found within the correlation matrix for factor analysis to proceed. In addition, bivariate correlations were proved to be all exceeding 0.30 with total-item-correlation below 0.95 level. EFA was then conducted which produced a single factor structure with strong item loading from 0.91 to 0.93 and total variance explained was 75.89%.

Cronbach's alpha of 0.84 was found indicating good reliability of the scale. Therefore, all items met the criteria of exploratory analysis and were retained for further confirmatory analysis.

Table 4.3: Descriptive Statistics

<u>Price similarity</u>	<u>Range</u>	<u>Min.</u>	<u>Max</u>	<u>Mean</u>	<u>Std.</u>
PRS1. I think the products "A" and "B" are priced similarly.	6	1	7	4.17	1.96
PRS2. I can hardly notice any differences between the prices of products "A" and "B".	6	1	7	4.12	1.88
PRS3. Paying price of "A" or paying price of "B" does not seem to have any difference to me	6	1	7	4.03	1.94
PRS4. I can afford paying price "A" as much as I can afford paying price "B".	6	1	7	4.04	1.86
<u>Package similarity</u>					
PAS1. The theme of the packages between "A" & "B" looks very similar.	6	1	7	4.42	2.42
PAS2. The colour of the package "A" and "B" looks very similar.	6	1	7	4.38	2.08
PAS3. It is hard to tell the difference between visual characteristics of the packages of "A" and "B"	6	1	7	4.45	2.08
PAS4. The overall look of product "A" greatly resembles the overall look of product "B".	6	1	7	4.31	2.12
PAS5. The logo of product "A" and "B" looks very similar.	6	1	7	4.24	2.10
PAS6. The brand name of product "A" and "B" sounds very similar.	6	1	7	4.23	2.02
PAS7. The package sizes of products "A" and "B" sounds very similar.	6	1	7	4.01	2.11
PAS8. The package shapes of products "A" and "B" looks very similar.	6	1	7	4.39	2.13
PAS9. The meanings of the package of products "A" and "B" have a lot in common.	6	1	7	4.01	2.08
<u>Third party organization endorsement</u>					
TPO1. I believe the endorsement from the third party is trustworthy.	6	1	7	3.93	1.98
TPO2. I believe the endorsement from the third party is honest.	6	1	7	4.17	1.95
TPO3. I believe the endorsement from the third party is sincere.	6	1	7	4.12	1.96

TPO4. I believe the endorsement from the third party is fair.	6	1	7	3.95	1.93
<u>Retailer image</u>					
R1. Product quality: Knowing the fact that products are sold at this store, I feel that A has a very good quality.	6	1	7	4.36	1.83
R2. Product assortment: The Store offers a variety of products.	6	1	7	4.53	1.76
R3. Product value: The products in the store are good value for money	6	1	7	4.41	1.82
R4. Convenience: The store is easily accessible.	6	1	7	4.10	1.66
R5. Service: The store provides very good customer service.	6	1	7	4.38	1.86
R6. Atmosphere: The interior decoration of the store usually let me feel pleasant atmosphere.	6	1	7	4.25	1.61
<u>Perceived quality</u>					
PQ1. The likelihood that the product would be reliable is very high.	6	1	7	3.95	1.45
PQ2. This product should be of very good quality.	6	1	7	3.98	1.62
PQ3. The likelihood of this product is dependable is very high.	6	1	7	3.79	1.46
<u>Purchase intention</u>					
PI1. I would absolutely consider buying this brand.	6	1	7	3.82	1.59
PI2. I would definitely expect to buy this brand.	6	1	7	3.80	1.65
PI3. I believe it is worthwhile to buy this brand.	6	1	7	3.73	1.64
PI4. I would buy this brand/product in the future.	6	1	7	3.91	1.44

Table 4.4: Results of Exploratory Analysis

<u>Latent Constructs</u>	<u>KMO</u>	<u>Bartlett's</u> <u>Test</u>	<u>Total item</u> <u>correlation</u>	<u>Variance</u> <u>explained</u>	<u>Cronbach's</u> <u>Alpha</u>
<u>Price similarity</u> (PRS1-PRS4)	.855	<.001	<.95	84.76%	.94
<u>Package similarity</u> (PAS1-PAS9)	.947	<.001	<.95	69.40%	.94
<u>Third party organization endorsement</u> (TPO1-TPO4)	.872	<.001	<.95	91.46%	.74
<u>Retailer image</u> (R1-R6)	.915	<.001	<.95	86.49%	.96
<u>Perceived quality</u> (PQ1-PQ3)	.702	<.001	<.95	75.89%	.84
<u>Purchase intention</u> (PI1-PI4)	.874	<.001	<.95	71.54%	.84

4.4.4 Preliminary Analysis Step Two: Confirmatory Analysis

Confirmatory factor analysis (CFA), on the other hand, overcomes the above-mentioned limitations in that the researcher specifies a model a priori, and tests the hypothesis that a relationship between the observed and latent variables does exist. This is extremely robust test when the researcher can postulate a model that draws its logic from research outputs in which reliable indicators of factors have previously been determined (Deeter-Schmelz et al., 2000, Sureshchandar et al., 2001). Furthermore, CFA offers a rigorous evaluation of dimensionality and internal consistency as each factor is related to only a subset of indicators (McGee & Peterson, 2000, Chandon et al., 1997). This being the case, and due to this study using both pre-existing measures and measures developed specifically for this study, a two-

step approach, which includes both EFA and CFA, was deemed appropriate. A similar procedure was adopted by Chandon et al. (1997) and Shi and Wright (2001) and follows two distinct steps. The following discussion describes the two-step process prior to the presentation of results.

Confirmatory analysis is referred to as scale verification and it is used to determine if the dimensions, as measured by the items selected in exploratory analysis, were truly convergent and unidimensional, and to examine if the individual measurement model provided a good fit to the data. At this point, the empirical assessment of convergent validity of the scale was assessed using guidelines recommended by Hairs et al. (1998). As they advocated, the guidelines are: all standardised loadings for a construct should be at least 0.50, and preferably 0.70; the threshold for composite reliability is considered to be 0.70; and average variance explained AVE should equal or exceed 50 % (Hair et al., 2006). Therefore, the standardised factor loadings, composite reliability, and AVE related to each construct were examined to determine convergent validity.

When examining the results of the CFA for each construct, the model fit statistics also need to be checked, as recommended by Chandon et al. (1997). They argue that the good model fit is achieved if the goodness of fit index (GFI) is above 0.95, Tucker-Lewis index (TLI) is above 0.90 and the comparative fit index (CFI) is above 0.90, while the root mean square residual and the root mean square error of approximation (RMSEA) are less than 0.05. Holmes-Smith and Coote (2001) predominantly agree with these cut-off scores, however, they indicate that a goodness of fit index score of 0.90 and above and a root mean square error score of 0.08 and below can also be regarded as a suitable fit. Cut-off scores shown in step two reflect Holmes-Smith and Coote (2001) comments. Those scales that produced

acceptable fit statistics through CFA (obtained using AMOS 20.0 with fit being assessed via maximum likelihood method) were then deemed to be both reliable and valid indicators of the measured constructs.

4.4.5 Results of Confirmatory Analysis

The proposed research model depicts a total of 6 constructs to be measured within the model. In this section, the overall measurement model was tested by performing a CFA via AMOS 20.0 using the maximum likelihood method (Jöreskog & Sörbom, 1996). The statistical results of the overall measurement model are presented in Table 4.5, which includes the standardised factor loadings, their associated standard errors and critical ratio, the average variance extracted for each construct, composite reliabilities and the key overall model fit statistics. Next, the results of testing the overall measurement model were examined. Both the overall model fit and criteria for construct validity were inspected.

The model was first tested with all 6 constructs including 26 items. The model fit indices indicated that the data and the measurement model were not well-fitted ($\chi^2/df = 2.139$, <5 , GFI=.907, $>.90$, TLI=.971, $>.95$, CFI=.974, $>.95$, RMSEA=.042, $<.08$). Modification indices were checked to identify large values and the associated items. According to Grace (2007), a decision should be made whether to delete the items all together or correlate the error terms. This decision was based on looking at large MIs for regression weights mean the item is cross-loading then should be deleted. Large MIs on error covariances usually mean that the two items are measuring the same thing and in this case, the error terms should be correlated in AMOS with double headed arrows. In our case, Item PAS5 and PAS6 reported a large MI value of 55.595, item PAS2 and PAS3 reported a large MI value of 33.584, item PAS1 and

item PAS3 reported MI values of 44.323 for covariance weights but not the regression weights, therefore, according to the suggestion of Grace (2002), PAS2 (.85), PAS3(.62), PAS5(.88), PAS6 (.86), the items were correlated and the model was run again.

The second analysis showed improvements on all indicators with χ^2 /df reduced to 1.943 level, GFI (.916), TLI (.976) and CFI (.979) all above .90, RMSEA (.045) was less than .08 but RMR still reported .088 more than bench mark of .05 level. The standardised factor loading all exceeded the preferable criterion of .70, although item PAS9 only showed a standardised loading of .71 compared to loadings of other items which were all well above .80. Therefore, PAS9 was taken out of the model to improve the overall model fit. This time, although the results of RMR (.064) was still not ideal, all other results indicated a very good fit of the measurement model and showed a significant improvement compared to the original model.

The key overall model fit statistics were: $\chi^2=612.502$ with 331 degrees of freedom and the χ^2 /df (1.850) was less than 5. As suggested by Hair et al. (2006), the model fit should rely on at least one absolute fit index and one incremental fit index, in addition to the χ^2 goodness-of-fit test statistic. The value for RMSEA, an absolute fit index, was .041 which fell into the acceptable value range ($< .08$) (Hairs et al., 1998). CFI, an incremental fit index, was .982 which exceeded the CFI guideline of .90 for a model of this complexity and sample size (Hair et al., 1995). Thus, the results indicate a good fit for the overall measurement model. Further, using the RMSEA and CFI satisfied the “rule of thumb” of Hair et al. (2006) that both a badness-of-fit index and a goodness-of-fit index be evaluated. In addition, the other index values were also supportive. For example, the GFI was .922, the TLI was .980, exceeding the fit criteria of .90 (Hairs et al., 1998).

Table 4.5: Results of the Measurement Model of Latent Variables

Construct/Indicator		Stand. Loadings	Stand. Error	Critical Ratio	AVE	Comp Rel.
Price Similarity (PRS)					.801	.941
PRS1	.94	.041	10.42 [*]			
PRS2	.84	.079	14.28 [*]			
PRS3	.85	.069	14.03 [*]			
PRS4	.95	.042	8.72 [*]			
Package Similarity (PAS)					.673	.942
PAS1	.73	.133	15.25 [*]			
PAS2	.85	.092	14.34 [*]			
PAS3	.62	.177	15.59 [*]			
PAS4	.92	.053	12.50 [*]			
PAS5	.88	.081	12.82 [*]			
PAS6	.86	.086	13.80 [*]			
PAS7	.83	.093	14.54 [*]			
PAS8	.90	.065	12.63 [*]			
PAS9	.68	.202	15.42 [*]			
Third Party Organization Endorsement (TPO)					.880	.967
TPO1	.95	.032	10.97 [*]			
TPO2	.93	.041	12.65 [*]			
TPO3	.93	.039	12.42 [*]			
TPO4	.95	.035	10.97 [*]			
Retailer Image (RI)					.836	.962
RI1	.97	.076	12.65 [*]			
RI2	.94	.029	12.41 [*]			
RI3	.96	.076	11.15 [*]			
RI5	.97	.021	15.49 [*]			
RI6	.74	.076	15.54 [*]			
Perceived Quality (PQ)					.648	.845
PQ1	.78	.062	11.69 [*]			
PQ2	.92	.032	13.01 [*]			
PQ3	.70	.032	10.64 [*]			
Purchase Intention (PI)					.778	.933
PI1	.92	.031	15.20 [*]			
PI2	.93	.072	12.17 [*]			
PI3	.75	.042	12.08 [*]			
PI4	.84	.056	12.24 [*]			
Model Fit						
χ^2	612.502		TLI		.980	
df	331		CFI		.982	
P	.001		RMSEA		.041	
GFI	.922		RMR		.064	

4.5 CONVERGENT VALIDITY

Convergent validity refers to the principle that the items of a construct be at least moderately correlated (Fornell & Larcker, 1981). That is, that a measure correlates with other indicators of the construct. It can be evaluated in three ways: by inspecting the average variance explained for each construct, similar to Balabanis et al. (2006); by evaluating the strength and significance of the factor loadings, and by examining the composite reliabilities.

As indicated by Fornell and Larcker (1981), convergent validity is achieved if the average variance explained (AVE) in items by their respective construct is greater than the variance unexplained ($AVE > 0.50$). Thus, to assess the constructs for convergent validity, the squared multiple correlations from the confirmatory factor analysis were used to calculate the AVE. Results of analysis for convergent validity confirmed that all constructs met the Fornell and Larcker (1981) criteria of $>.50$. The calculated AVE for constructs in our measurement models are as follows—price similarity (.80), package similarity (.67), third party organization endorsement (.88), retailer image (.84), perceived quality (.65), purchase intention (.78).

In addition, convergent validity in the scales can also be assessed by factor loadings.

Following the recommendation of Hair et al. (2006) factor loading greater than .50 were considered to be significant. All of the standardised factor loadings of the items in the each measurement model exceeded .70 level and therefore they were significant, providing another support for a high degree of convergence.

The reliability of the constructs was estimated by composite reliability. The composite reliability for all constructs in the measurement model was above the recommended .70 level (Bagozzi & Yi, 1988). Therefore, the reliability was confirmed for these constructs. The calculated composite reliability of each of the constructs as follows—Price similarity (.941), package similarity (.942), third party organization endorsement (.967), retailer image (.962), perceived quality (.845), purchase intention (.933). Overall, the reliability and convergent validity of the constructs were satisfactory.

4.6 DISCRIMINANT VALIDITY

Discriminant validity refers to the degree to which a construct differs from other constructs (Hair et al., 2006). It is the extent to which latent variable A discriminates from other latent variables (e.g. B, C, D). Discriminant validity means that a latent variable is able to account for more variance in the observed variables associated with it than a) measurement error or similar external, unmeasured influences; or b) other constructs within the conceptual framework. If this is not the case, then the validity of the individual indicators and of the construct is questionable (Fornell & Larcker, 1981). Discriminant validity establishment is crucial for conducting latent variable analysis (Fornell & Larcker, 1981). Without it, researchers cannot be certain whether results confirming hypothesised structural paths are real or whether they are a result of statistical discrepancies.

An approach for establishing discriminant validity is to compare the χ^2 difference which involved 15 comparisons of the constrained and unconstrained measurement models of all construct pairs. Anderson and Gerbing (1988) suggest that the parameter estimate for two factors be constrained to 1.0 (constrained model) and compared to a model where this

parameter is freely estimated (unconstrained model). This test is then run for every possible pairing of constructs in a study. If the unconstrained model, with the drop of one degree of freedom, returns a chi-square value that is at least 3.84 lower than the constrained model, then a two factor solution provides a better fit to the data and discriminant validity between A and B is supported. For example, the chi value for each pair of the six latent variables in the unconstrained measurement model were constrained to 1, one at a time, and then χ^2 difference was calculated for each pair of unconstrained and constrained models, similar to Li and Dant (1997). The results of these comparisons appear in Table 4.6 below. Of the 15 comparisons conducted, all comparisons passed the χ^2 difference test thus indicating that the constructs discriminate from each other. On this basis, all variables were retained for further analyses.

Table 4.6: Results of Discriminant Analysis

Comparisons		Constrained model		Unconstrained model		Chi-square difference		Discriminant validity
		χ^2	df	χ^2	df	$\Delta\chi^2$	Δdf	
PRS	PAS	85.66	23	16.50	22	69.16	1	Yes
	TPO	113.12	27	51.80	26	61.32	1	Yes
	RI	44.98	14	24.84	13	20.14	1	Yes
	PQ	20.78	5	4.63	4	16.15	1	Yes
	PI	38.45	9	7.90	8	30.55	1	Yes
PAS	TPO	308.11	54	287.04	53	21.07	1	Yes
	RI	268.65	35	226.18	34	42.47	1	Yes
	PQ	641.72	27	213.46	26	428.26	1	Yes
	PI	610.78	27	202.48	26	108.98	1	Yes
TPO	RI	98.65	35	69.58	34	29.07	1	Yes
	PQ	115.65	27	60.59	26	55.06	1	Yes
	PI	105.05	27	61.28	26	43.77	1	Yes
RI	PQ	81.04	14	33.60	13	47.44	1	Yes
	PI	43.15	14	22.78	13	20.37	1	Yes
PQ	PI	48.96	9	20.61	8	28.35	1	Yes

4.7 COMMON METHOD BIAS

As single sources of information can introduce spurious relationships among the variables, and as this study collected data via the same method (self-report scales), the need to test for common method bias was warranted. In the behavioural sciences, there have been a number of published techniques which assist with the assessment of common method bias, for example, partial correlation procedures, Harman's single-factor test, multiple method factors test, etc. However, no test is without its disadvantages (Podsakoff et al., 2003). To address common method bias, two steps were undertaken. First, the measurement scales in the survey were arranged so that the measures of independent variables preceded the dependent variables and items on constructs which have the same scale poles were distributed in a non-sequential order (Salancik & Pfeffer, 1977).

Second, Harman's one-factor test was also conducted. All items, presumably measuring a variety of different constructs, were subjected to a single factor analysis. Using this approach, 24 factors were extracted with eigenvalues greater than 1 and the variance explained was 44.33%. The first factor accounted for 21.79% of the variance with the second factor accounted for 16.23% and the variance was not accounted for by one general factor, a substantial amount of common method bias was not evident.

Apart from the two-step validation of common method bias, another approach is also adopted to ensure the accuracy of the results. Typically, in the single-factor test, all of the items in a study are subject to exploratory factor analysis (EFA). As an alternative to EFA, a researcher can use CFA in implementing Harmon's single-factor test. In particular, the CFA approach can model all of the manifested items as the indicators of a single factor that represents

method effects (Malhotra et al., 2006). The single factor model in CFA fitness indices ($\chi^2=14410.072$, $\chi^2/df=57.183$, RMSEA=0.342, GFI= 0.236, IFI= 0.284, CFI= 0.283 and NFI=0.280) does not yield a better result than the present model, confirming no serious problem of common method bias in this study.

Having completed preliminary analysis data screening and purification, all scale items retained for further analysis are argued to be both valid and reliable measures. As previously discussed in methodology in chapter three, face validity and content validity were ensured through a detailed analysis of the conceptual and empirical literature. In addition, the preliminary analysis approach through exploratory and confirmatory analysis was able to address issues such as construct validity, reliability and unidimensionality. Furthermore, the preliminary analysis provided the evaluation of the data to identify any violations to the assumptions underlying the intended analysis. The verification of convergent and discriminant validity and a test for common method bias completed the final phase of the preliminary data analysis. The next analysis via Minitab and SPSS is to examine the hypotheses testing posed in this study.

4.8 HYPOTHESIS TESTING

Factorial designs allow the research to simultaneously study the effects that several factors may have on a process. When performing an experiment, varying the levels of the factors simultaneously rather than one at a time is efficient in terms of time and cost, and also allows for the study of interaction between factors.

The first part of the model proposed in this study establishes the relationship between four contextual factors in perceived quality and purchase intentions. It is posited that four contextual factors including price similarity, package similarity, third party organization endorsement and retailer image have effects on the level of perceived quality (DV1) and purchase intention (DV2) when consumers were subject to multiple product information in the purchase condition.

Hypotheses 1 to 3 were tested using factorial ANOVA. The independent variables were price similarity (high or low), package similarity (high or low), third party organization endorsement (high or low), and retailer image (high or low). All four independent variables were used to manipulate experimental conditions for the study. The dependent variable was perceived quality (DV1) and purchase intention (DV2).

For DV1, a 2 (price similarity) x 2 (package similarity) x 2 (third party organization endorsement) x 2 (retailer image) between-subjects factorial analysis of variance was calculated on perceived quality that participants experienced. There was a significant price similarity x package similarity x retailer image three-way interaction. The analysis further revealed significant two-way interactions for price similarity by package similarity. Significant simple main effects exhibited for price similarity, package similarity and retailer image. The effect of third party organization endorsement appears to be insignificant on perceived quality.

Although a three-way interaction was not predicted in this study, the price similarity x package similarity x retailer image interaction was significant from the analysis. However, a close examination of the effect size using omega squared (ω^2) revealed that the three-way

interaction had a relatively medium effect ($\omega^2=0.51$). Omega squared (ω^2) is the most popular measure of effect size, which represents the proportion of variance accounted for by the treatment manipulation. Omega squared (ω^2) is based on two variances, one derived from the treatment populations and the other derived from the total population variance [$\omega^2 A = \sigma^2 A / (\sigma^2 A + \sigma^2 S/A)$]. In this study, partial omega squared was calculated because it is not directly influenced by the presence of other factorial effects. According to Cohen's guideline (1977: 284-288), ω^2 ranges from 0 to 1. A $\omega^2 = 0.15$ is considered to be a large effect, $\omega^2 = 0.06$ is an acceptable medium effect, $\omega^2 = 0.01$ is a small effect. If $\omega^2 = 0$, there are no population treatment effects. For the three-way interaction price similarity x package similarity x third party organization endorsement, the ω^2 recorded 0.051 which suggests that although the three-way interaction was statistically significant, and a medium effect sizes indicates there may be certain level of practical significance among the interactions. However, there is no theoretical support for a price similarity x package similarity x retailer image interaction and previous research has also concluded that three way interactions are too uninterpretable for researchers. Therefore, no further investigation of the three-way interaction was made.

Table 4.7: Factorial Analysis of Variance (DV: Perceived quality)

Source of variations	Sum of squares	df	Mean square	F	ω^2	p
Price similarity	311.60	1	311.60	990.20	.351	<.05*
Package similarity	305.39	1	305.39	970.41	.345	<.05*
TPO	.493	1	.493	1.57	<.01	.21
Retailer image	60.91	1	60.91	193.57	.069	<.05*
Price similarity x Package similarity	23.87	1	23.87	75.84	.027	<.05*
Price similarity x Retailer image	2.73	1	2.73	8.68	<.01	<.05*
Price similarity x TPO	.319	1	.319	1.01	<.01	<.05*
Package similarity x Retailer image	.786	1	.786	3.00	<.01	.115
Package similarity x TPO	3.21	1	3.21	10.20	<.01	<.05*
Retailer image x TPO	0.193	1	0.193	.614	<.01	.434
Price similarity x Package similarity x Retailer image	15.38	1	15.38	48.85	.017	<.05*
Price similarity x Package similarity x TPO	.689	1	.689	2.19	<.01	.140
Price similarity x Retailer image x TPO	.777	1	.777	2.47	<.01	.117
Package similarity x Retailer image x TPO	1.537	1	1.537	4.89	<.01	<.05*
Price similarity x Package similarity x Retailer image x TPO	1.06	1	1.06	3.63	<.01	.067

* $p < .05$

H1a: For products with brands unknown to consumers, the higher price similarity they have to famous brand, the higher consumers' perceived quality.

Factorial analysis of variance revealed that there was a significant main effect for price similarity on the level of perceived quality evoked: $F(15, 496) = 990.20, p < 0.05, \omega^2 = 0.351$.

Besides, approximately 37.2% percent of the total variance in perceived quality is accounted for by the experimental treatment of price similarity. These results indicates, that the increase of price similarity level positively and significantly affect the level of consumers' perceived quality. Therefore, hypothesis 1a is supported.

H1b: For products with brands unknown to consumers, the higher their package similarity is to famous brand, the higher consumers' perceived quality towards the products.

Factorial analysis of variance revealed that there was a significant main effect for retailer image on the level of perceived quality evoked: $F(15, 496) = 970.41, p < 0.05, \omega^2 = 0.345$. Approximately 36.1% percent of the total variance in perceived quality is accounted for by the experimental treatment of retailer image. These results indicate that the increase of package similarity will affect the level of consumers' perceived quality significantly. However, estimated effects from factorial ANOVA (Table 4.7) shows negative effects of package similarity to perceived quality, which means the increase of package similarity condition in the experimental condition had led to a lower level of consumers' perceived product quality. Therefore, hypothesis 1b is not supported. In fact, the actual results showed just the opposite compared to our hypothesis.

H1c: For products with brands unknown to consumers, the higher level of third party organization endorsement in product advertisement, the higher perceived quality of the products.

Factorial analysis of variance revealed that there was a significant main effect for retailer image on the level of perceived quality evoked: $F(15, 496) = 1.57, p = .21, > .05$ which

indicates the effect of third party organization endorsement is insignificant on perceived quality. The results does not show the increase of third party organization endorsement in advertisement will positively and significantly affect the level of consumers' perceived quality. Therefore hypothesis H1c is not supported.

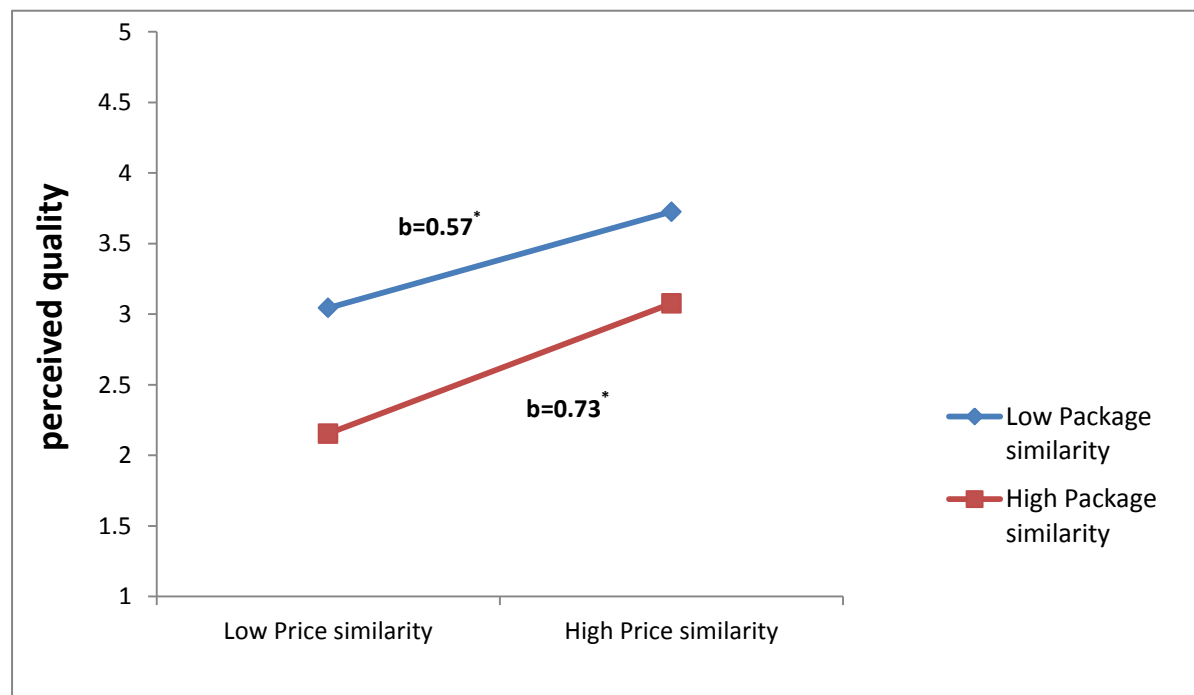
H1d: For products with brands unknown to consumers, the higher the retailer image, the higher consumers' perceived quality.

Factorial analysis of variance revealed that there was a significant main effect for retailer image on the level of perceived quality evoked: $F(15, 496) = 193.57, p < 0.05, \omega^2 = 0.069$ which indicates a medium effect size. Besides, approximately 8.9% percent of the total variance in perceived quality is accounted for by the experimental treatment of retailer image. These results indicates that the increase of retailer image level positively and significantly affect the level of consumers' perceived quality. Therefore, hypothesis 1d is supported.

Apart from the hypothesis testing, as mentioned in literature review, although no hypothesis were proposed, the study expected to observe interaction effect among extrinsic cues in the condition of simultaneous presentation of cues. Two pairs of two-way interaction with price similarity by package similarity, price similarity by retailer image were found to be significant ($p < .05$). However, the study only analysed the interactions between price similarity and package similarity because the interactions exhibits medium effect size ($\omega^2 > 0.27$) while the interactions between price similarity and retailer image only recorded effect sizes that was under minimum bench mark at the 0.01 level which indicates the results may not be practically meaningful.

The interaction effect between package similarity and price similarity was analysed with hierarchical regression. Perceived quality was regressed separately on price similarity at two levels of package similarity. The results demonstrated that when there is low level of package similarity, the effect of price similarity on perceived quality of the unknown brands is significant and the regression coefficient is 0.56 while the regression coefficient is 0.73 when the package similarity of the products is high. Therefore, the effect of price similarity is higher when the products possess a higher level of package similarity to the known, famous brands. These differential effects can also be seen in Figure 4.1.

Figure 4.1: Effect of Price Similarity on Perceived Unknown Brands quality: By Package Similarity



For DV 2, a 2 (price similarity) x 2 (package similarity) x 2 (third party organization endorsement) x 2 (retailer image) between-subjects factorial analysis of variance was calculated on purchase intention of participants. There was significant price similarity x package similarity x retailer image and package similarity x retailer image x third party

organization endorsement three-way interaction. The analysis further revealed significant two-way interactions for price similarity by package similarity, package similarity by third party organization endorsement. There were significant main effects for price similarity, package similarity, and third party organization endorsement and retailer image.

Similar to the results of study 1, although a three-way interaction was not predicted in this study, the price similarity x package similarity x third party organization endorsement interaction and price similarity x package similarity x retailer image were significant from the analysis. However, a close examination of the effect size using omega squared (ω^2) revealed that the three-way interaction had a small effect, which suggests that although the three-way interaction was statistically significant, it is unlikely to have any practical significance. Besides, there is no theoretical support for the three-way interactions and they are also uninterpretable. Therefore, no further investigation of the three-way interaction was made.

Table 4.8: Factorial Analysis of Variance (DV: Purchase Intention)

Source of variations	Sum of squares	df	Mean square	F	ω^2	p
Price similarity	314.63	1	314.63	1080.72	.297	<.05*
Package similarity	401.43	1	401.43	1378.87	.379	<.05*
TPO	2.84	1	2.84	9.75	<.01	<.05*
Retailer image	97.28	1	97.28	334.15	<.01	<.05*
Price similarity x Package similarity	23.04	1	23.04	79.14	.022	<.05*
Price similarity x Retailer image	2.79	1	2.79	9.59	<.01	<.05*
Price similarity x TPO	.319	1	.319	1.01	<.01	.314
Package similarity x Retailer image	.006	1	.006	.022	<.01	.882
Package similarity x TPO	8.80	1	8.80	30.22	.008	<.05*
Retailer image x TPO	.169	1	.169	.581	<.01	.446
Price similarity x Package similarity x Retailer Image	54.34	1	54.34	186.65	.051	<.05*
Price similarity x Package similarity x TPO	1.87	1	1.87	6.40	<.01	<.05*
Price similarity x Retailer Image x TPO	0.41	1	0.41	1.49	<.01	.223
Package similarity x Retailer Image x TPO	2.22	1	2.22	7.61	<.01	<.05*
Price similarity x Package similarity x Retailer image x TPO	.919	1	.919	3.156	<.01	<.05*

* $p < .05$

H3a: For products with brands unknown to consumers, the higher price similarity they have to famous brand, the higher consumers' intention to purchase the products.

Factorial analysis of variance revealed that there was a significant main effect for price similarity on the level of purchase intention evoked: $F(15, 464) = 1080.72$, $p < 0.05$, $\omega^2 = .297$.

Approximately 32.7% percent of the total variance in purchase intention is accounted for by the experimental treatment of price similarity. These results indicates that the increase of price similarity level positively and significantly affect the level of consumers' purchase intention of unfamiliar brands in the experimental condition. Therefore, hypothesis 3a is supported.

H3b: For products with brands unknown to consumers, the higher their package similarity is to famous brand, the higher consumers' intention to purchase the products.

Factorial analysis of variance revealed that there was a significant main effect for retailer image on the level of purchase intention evoked: $F(15, 464) = 1378.87, p < 0.05, \omega^2 = .379$. Approximately 38.3% percent of the total variance in purchase intention is accounted for by the experimental treatment of package similarity. These results indicate that the increase of package similarity will affect the level of consumers' purchase intention significantly. However, estimated effects from factorial ANOVA (Table 4.8) shows negative effects of package similarity to purchase intention, which means the increase of package similarity condition in the experimental condition had led to a lower level of consumers' purchase intention of the products. Therefore, hypothesis 3b is not supported. In fact, the actual results showed just the opposite compared to our hypothesis.

H3c: For products with brands unknown to consumers, the higher the retailer image, the higher consumers' intention to purchase the products.

Factorial analysis of variance revealed that there was a significant main effect for retailer image on the level of purchase intention evoked: $F(15, 464) = 334.15, p < 0.05, \omega^2 = .092$.

Approximately 10.2% percent of the total variance in purchase intention is accounted for by the experimental treatment of retailer image. These results indicates that the increase of retailer image level positively and significantly affect the level of consumers' purchase intention towards unfamiliar brands in the experimental situation. Therefore, hypothesis 3c is supported.

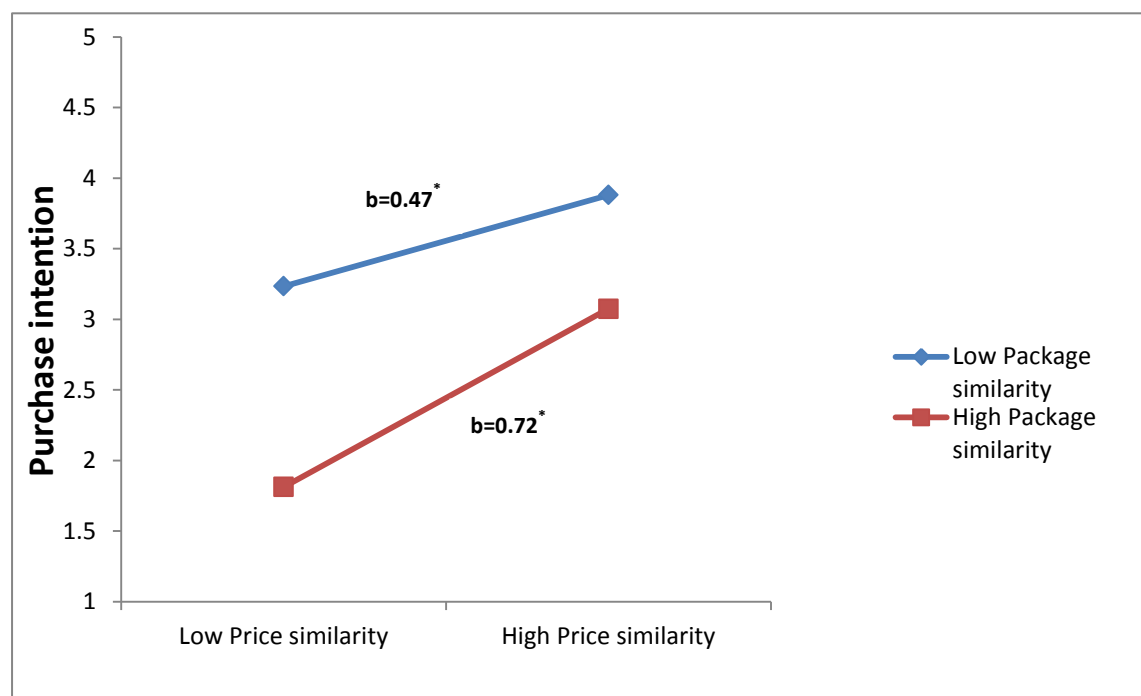
H3d: For products with brands unknown to consumers, the higher level of third party organization endorsement in product advertisement, the higher consumers' intention to purchase the products.

Factorial analysis of variance revealed that there was a significant main effect for retailer image on the level of purchase intention evoked: $F(15, 464) = 9.75, p = .002, > .05$ level which indicates insignificant effect on purchase intention. These results indicate that the increase of third party organization endorsement in advertisement will not positively and significantly affect the level of consumers' purchase intention of the products under the experimental condition. Therefore, hypothesis 3d is not supported.

Two pairs of two-way interaction with price similarity by package similarity, price similarity by retailer image were found to be significant ($p < .05$). However, the study only analysed the interactions between price similarity and package similarity because the interactions exhibits medium effect size ($\omega^2 > 0.22$) while the interactions between price similarity and retailer image only recorded effect sizes that was under minimum bench mark at the 0.01 level which indicates the results may not be practically meaningful.

The interaction effect between package similarity and price similarity was analysed using hierarchical regression. Perceived quality was regressed separately on price similarity at two levels of package similarity. The results demonstrated that when there is low level of package similarity, the effect of price similarity on perceived quality of the unknown brands is significant and the regression coefficient is 0.47 while the regression coefficient is 0.72 when the package similarity of the products is high. Therefore, the effect of price similarity is higher when the products possess a higher level of package similarity to the known, famous brands. These differential effects can also be seen in Figure 4.2.

Figure 4.2: Effect of Price Similarity on Purchase Intention: By Package Similarity



4.9 TEST FOR MEDIATION

Mediation is a hypothesised casual chain in which one variable affects a second variable that, in turn, affects a third variable. In order to test hypothesis 4, a test for mediation effect is required.

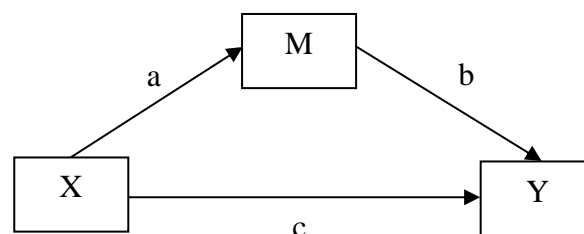
H4: For products with unknown brands to consumers, consumers' perceived unknown brands quality mediates the relationship between extrinsic cues and purchase intention.

To test this hypothesis, the study followed the procedures suggested by Baron and Kenny (1986) and established four steps. According to Baron and Kenny (1986), a four step approach in which several regression analyses are conducted and significance of the coefficients is examined at each step. A simple explanation of Baron and Kenny's test for mediation can be demonstrated in Table 4.9 and Figure 4.3 as follows:

Table 4.9: Baron and Kenny's Four Step Mediation Test:

	Analysis
Step 1	Conduct a simple regression analysis with X predicting Y to test for path c alone, $Y = B_0 + B_1X + e$
Step 2	Conduct a simple regression analysis with X predicting M to test for path a alone, $M = B_0 + B_1X + e$
Step 3	Conduct a simple regression analysis with M predicting Y to test the significance of path b alone, $Y = B_0 + B_1M + e$
Step 4	Conduct a multiple regression analysis with X and M predicting Y, $Y = B_0 + B_1M + B_2X + e$

Figure 4.3: Baron and Kenny's Four Step Mediation Test



The purpose of step 1-3 is to establish that zero-order relationships among the variables exist. If one or more of these relationships are non-significant, researchers usually conclude that

mediation is not possible or likely. Assuming there are significant relationships from step 1 through 3, one proceeds to step 4. In the step 4 model, some form of mediation is supposed if the effect of M remains significant after controlling for X. If X is no longer significant when M is controlled, the finding supports full mediation. If X is still significant (i.e., both X and M significantly predict Y), the finding supports partial mediation.

In our case, step 1 was completed as the tests of H1a-H1d have confirmed the significant effects of price similarity, package similarity and retailer image on perceived quality while step 2 was completed because H3a-H3d has confirmed the three identified extrinsic cues significantly affects purchase intention. Because H1c and H3c are not supported, the causal variable third party organization endorsement is not significantly correlated with the outcome variables purchase intention and perceived quality. Therefore, H4c is not supported. In order to complete step 3, general linear regression in SPSS was adopted to test the relationship between perceived quality and purchase intention (H2). ANOVA table exhibits an F ratio of $F = 1825.77$, and the significance of this F ratio is $p < 0.001$. It is reasonable to conclude from this that the results of the analysis are not due merely to chance. The scatter plot also shows a significantly positive correlation between perceived quality and purchase intention, therefore H2 is supported.

Therefore, step 3 is completed and it is confirmed that perceived quality affects purchase intention significantly. After the testing of first 3 steps, the mediation effect of perceived quality on the relationship of extrinsic cues and purchase intention is demonstrated. Therefore, hypothesis H4a, H4b and H4d is supported. As for step 4, because it is not of this study's interest to explore whether full mediation or partial mediation exists in this relationship, the mediation test did not proceed further.

4.10 CHAPTER SUMMARY

Overall, the data collected provided very good support for the proposed research model. Pre-tests have confirmed successful manipulation of experimental variables. Factorial ANOVA indicates that all independent variables have significant main effects on dependent variables: perceived unknown brands quality and purchase intention. Furthermore, two way interactions were found between price similarity and package similarity. Lastly, the mediating role of perceived quality between extrinsic cues of unknown brands and purchase intention is confirmed. The statistical results from this chapter will be interpreted in greater details in chapter five.

CHAPTER 5: DISCUSSIONS AND FUTURE RESEARCH

5.1 CHAPTER OVERVIEW

In this chapter, a review of the research objectives is offered, followed by a discussion of the research findings. Implications are drawn for both academia and practitioners. Then, limitations are addressed and finally, future research possibilities are explored.

This dissertation research used an experimental design to study consumers' perceived product quality and purchase intention under the condition of multi-cue simultaneous influence in the purchase situation. By using a randomised field experiment, this study examined the causal relationship between product extrinsic cues and perceived quality/purchase intention in terms of price similarity, package similarity, perception of retailer image, and perception of third party organization endorsement. In addition, by using Beijing transportation station as sample selection site, this study attempted to improve the limitations of student sampling adopted by previous research.

Consumers often consider unknown brands to be of lower quality than well-known brands (Van Horen & Pieters, 2012, Beneke, 2010). Quality is considered to be a major determinant of future unknown brand purchasing. That is, unknown brands must offer not only value for the money, but also good quality assurance for consumers who are expected to make inferences from extrinsic cues to quality and apply schemata (Crocker et al., 1984). The dissertation examined specific extrinsic cues to quality that may be used by consumers when evaluating unknown brand quality, with the dissertation allowing discussion on the following topics.

1. Should unknown brands raise their price closer to the leading national brand? Does the similarity of the unknown brand prices to the famous brand prices determine consumer categorization of the unknown brands towards that of the famous brand in terms of quality?
2. Should unknown brands imitate the package appearance of the leading national brands?
3. Does the identification of third party organization endorsement help determine consumer quality judgements and intention of purchase?
4. Should the marketer of unknown brands seek a retailer with high reputation and higher distribution cost? Are retailers with higher reputations able to influence consumers judgments of the unknown brands in their stores?
5. Are the combination and the congruity of the cues to quality important in determining consumer quality judgement and the intention to purchase unknown brands?

5.2 PRICE SIMILARITY

Similarity to the price of famous brands was found to have a significant effect on consumer quality judgements and intention to purchase of unknown brands. This is in line with many previous studies which demonstrated that consumer's price knowledge tend to be low (Hoch & Lodish, 1998, Evanschitzky et al., 2004, Kenning et al., 2007). Therefore, our study supported the argument that consumers were only aware that unknown brands should be

priced at a lower level than national brands, indicating a rather vague internal reference price for unknown brands anchored on leading national brands. Assimilation/contrast theory supports the contention that consumers mostly look for a contrast on price and consumers may have both a price and a percentage less than the market-leading famous brands in mind. According to our results, narrowing the price gap between unknown brands and leading national brands can significantly increase consumers' perceived product quality and intention to purchase. Therefore, it is concluded that the prices of unknown brands could be raised to a certain level and still bring even better quality judgements from consumers and higher intention to purchase. The increase of price may sound troubling given the schema consumers have in mind that the price of unknown brands should be "low", and more specifically, lower than market-leading brands, but if the consumers do not care or are not aware of the actual price gaps between unknown brands and market-leading famous brands, then there is little point of continually charging deep discounted prices which brings neither better quality judgement nor higher intention to purchase.

It should be noted that our results are not consistent with Cudmore's (2000) study of private label store brands, from which he had found the fact that reducing the price gap between private label brands and national brands is not conducive to consumers' perceived product quality of former. This is not surprising as two main reasons were identified for the inconsistent results between the two studies. First of all, research has demonstrated that consumers rely heavily on the store image construct when judging the quality and image of private label brands (Wu et al., 2011, Robert et al., 2010, Dany et al., 2013, Beneke et al., 2012) . In view of the fact that the store name is usually the brand name of private label brands, store image could reflect a price component that refers to the general price levels within the store, which in turn, affects the consumers' perception and quality expectation of

private label brands. Therefore, the overwhelming influence from consumers' perception of the store could become more diagnostic than any other extrinsic cues for the private label brands. As for the unknown brands, the brand name may have no direct association with the vendor's name, therefore, the effects of other extrinsic cues (such as price), were influenced by the retailer image at a more general and moderate level. Secondly, from the perspective of services marketing, in view of the fact that private label brands have the same brand name as their service provider (vendor), the customer gap of the service brand is likely to evolve and become the gap of private label brands. In other words, consumers may associate their past experience with the service provider to their feelings of the private label brands. The experience could relate to human factors, environmental factors and actual procedures of the service. For example, service people play a significant part in service delivery and thus influence buyer's perceptions. If a customer perceives the service staff in a store having great customer service skill and the relationship between customers and service employees are very close and positive, the customer will have a better perception of the service brand (retailer name) and they may tend to migrate this positive feeling to the private label brands sold in this store. Similarly, if customers have doubts of the service quality of a service provider (bad service, rude staff, and poor store physical settings, incompetent check out system), their anxieties and uncertainties about the quality of private label brands sold in the store may increase as well. As for unknown brands, because the connection between the brands and the name of the service providers are not as close as that of the private label brands, this emotional effect from consumers may tend to play a less significant role in quality judgement and image perception. Thirdly, prior research has shown a range of effects of price from none to moderate in the presence of other extrinsic cues to quality (Rao & Monroe, 1989), therefore, other studies might have chosen different price levels than in this study and this caused effect. The differences concluded above indicate that the drivers for consumers to

purchase unknown brands and private label brands are quite distinct; therefore, it is not appropriate to apply any conclusion of this study to the studies of private label brands.

Furthermore, factorial ANOVA indicates that the relative strength of price similarity had a significant effect on the observed price similarity- perceived quality and price similarity-purchase intention relationship. The results also indicated that higher price similarity can lead to higher perceived brand quality and trigger higher purchase intention. Theoretically, this finding is important as most previous research argues that price serves purely as an hedonic function that higher price generally provides better quality. From the perspective of assimilation/contrast theory, the researcher has demonstrated that the “anchor” effect plays a more important role determining perceived quality in purchase situations of unknown brands. When buyers do infer a positive relationship between price and product quality, they are likely to compare the price of the unknown brands against an alternative option for an internal reference price. When the price of unknown brands is not perceived as significantly different from the “anchor”, the consumers are likely to divide the quality of unknown brands’ into a similar category as the “anchor” brands’ quality. This has implications for brand managers since consumers are more likely to pay a price premium for brands they perceive as having higher quality; if the price of unknown brands was set too low, then consumers will perceive the brand quality as inferior and further reduce their willingness to pay for the brand. However, if the price is close to the national brands, the “anchor”, then consumers will perceive the brand quality nearly as good as the national brands; therefore they are more likely to be willing to pay a price premium. At the same time, consumers may also enjoy the pleasure of money saving as the high-priced unknown brands is still cheaper than the famous brands. Since previous research has indicated Chinese customers are more price-sensitive

(Zhou & Nakamoto, 2001, Meng & Nasco, 2009), this finding is particularly useful for the marketing of unknown brands in China.

5.3 PACKAGE SIMILARITY

Some unknown brands try to imitate the visual appearance of a leading brand with the aim of exploiting positive associations related to the leading brand (Harvey et al., 1998, Ward et al., 1986, Warlop & Alba, 2004). This imitation affords a natural application of assimilation/contrast theory that is based on the presence of an anchor (Sherif & Hovland, 1961). The market-leading famous brand is a natural anchor for the consumer to make comparisons with the unknown brands, especially given the similarity of the package appearance of the unknown brands to that of the market-leading famous brands. Our experimental results suggest that higher package similarity has negative effect on consumers for product quality judgement and reduces their interest to purchase unknown brands.

Surprisingly, this finding was not consistent with our hypothesis which proposed that unknown brands with package more similar to market-leading famous brands will be found elicit significantly higher perceived quality judgments than unknown brands with lower package similarity.

The occurrence of this inconsistency could be due to several reasons. First of all, some literature did provide support to the notion that inferred similarity based on non-diagnostic cues such as superficial package features may lead to unwarranted beliefs (Gilovich, 1981) and an imitator may be penalised if package similarity is perceived as an intentional ploy to mislead consumers about product quality (Campbell & Kirmani, 2000) or an attempt to free

ride on the efforts of the leader. This was initially the direction of the hypothesis until the study took culture influence into consideration. As mentioned in previous sections, Chinese tend to feel a sense of pride when they see a cheap copy of a Western brand. They believe it reflects well on the ingenuity and resourcefulness of the Chinese people; Chinese teaching systems encourages copycat behaviour and this may have formed a different mindset to western consumers; however, the findings suggest otherwise. The results indicate that Chinese consumers, just like consumers in western countries, are more likely to penalise blatant copycat behaviour and treat it as a lack of brand imagination.

The finding contributes to the similarity and copycat literatures by identifying Chinese consumers' attitudes on firms' behaviour of promoting or dampening perceived similarity between a leading brand and an unknown brand. Previous literature suggests that consumers may be influenced by culture background and react differently to product extrinsic cues in a purchase situation. The current findings are, to the author's knowledge, the first approach to reveal that, for attribute-based copycats, the reaction of Chinese individuals is similar to that of Western consumers and therefore, culture did not play a critical role in determining consumers' product cue usage on the evaluation of perceived product quality and intention to purchase.

The finding also presents practical implications to brand managers of SMEs in China. With the fast development of information technology, increased household income, and higher awareness of brand function, Chinese consumers may have shifted their focus from price to a focus on brand symbolic function. They are now more aware of the benefits that brands can serve, not only from the functional point of view but also the symbolic benefits of using a brand. Furthermore, with the Chinese media exposing more and more problems in regards to

food safety, product quality scandal and counterfeit product, the product price may become more of a needless concern for Chinese consumers, while safety, assurance and security are likely to dominate their intention of choosing products from the market. Therefore, consumers will be more willing to purchase well- branded products due to the need of reducing such concern rather than paying a little less and put the health and safety of their family in danger. For SMEs, the adoption of copycat strategy can help the firm “steal” brand equity from leading national brands in the short term and save some money on marketing and advertising. However, they need to be aware that unlike Western countries, where law and regulations are complete and comprehensive, the users’ safety concern in China is significant which may eventually stop consumers from purchasing the brands that are considered as simply copycats. Although regulations in China still somehow allows the existence of blatant copycats, the awareness of Chinese government on copyright and trademark protection is increasing and the Chinese government has been actively implementing stricter laws and regulations on the protection of trademarks and copyrights in the past few years. Therefore, for those SMEs who intended to produce copycat brands with package similarity condition beyond an acceptable range of imitation, they need to become more careful on the infringement of trade dress to avoid any unnecessary legal matters. Finally, the results indicate that package similarity ranked the second important factors in determining consumers’ judgement on perceived product quality and intention to purchase. It is found to be one of the most important product cues that can be used to increase consumers’ evaluation of the unknown brands. Therefore, brand managers should pay attention to the design of their product package in order to suit their brand image and brand identity. As for SMEs who cannot afford massive spending on marketing, some focus on the investment of package design should definitely be considered a good deal in terms of sales returns.

5.4 RETAILER IMAGE

Retailer image is a complex construct made up of service, selection, quality, prices and atmosphere (Jacoby & Mazursky, 1984, Manolis et al., 1994). Our results indicate that a more favourable retailer image could result in significantly higher unknown brand quality judgments. This may indicate that consumers do categorise unknown brands into different tier levels based on the retailers who stock them rather than merely using the “unknown brands” identification as the more diagnostic cue. However, compared to the effect of price similarity cue and package similarity cue, it was found that the influence of retailer image on perceived product quality and consumers intention to purchase is relatively smaller. Previous studies did find similar results, but the retailer image construct was more tested on store brands and private label brands, while in this research, attention was paid to unknown brands which had names and logos that consumers are either not familiar with or cannot recognise. Though unknown brands do share some similar features with private label brands, the influence of retailer image on the two different types of brands could be entirely different. For the store brands or private label brands, the vendor’s name poses a much larger effect on the quality judgements of the products it sells because the product and the store share the same brand name. Therefore, the brand name of the store will directly reflect the quality cues for the store brands sold in the very store. A more specific example would be when customers go to Woolworth and purchase a certain Woolworth branded oil, the one thing that affects consumers’ judgement the most could be the image of Woolworth as a whole rather than price and package. Consequently, if the customer has a better evaluation of the brand name of Woolworth then they might have generated a positive image towards the products before going deeper into other diagnostic cues. If the customer is a strong believer of Woolworth’s “fresh every day” then the image in customers’ mind may become “fresh, organic” etc. and

therefore increase the willingness to purchase any food brands carrying the name of Woolworth. Such positive perception could turn to positive evaluations of the brands and positively influence consumers purchase decision making of the products. On the contrary, if the customer perceive “Woolworth” as an expensive retail brand that sells products the same quality of other vendors but charges a much higher price premium. Then the perception “Woolworth is not very good value for money” may develop. This perception could further lead to negative emotions which may antagonise the customer so they focus more on other diagnostic cues, make comparisons of “Woolworth” home brands products and other market-leading famous/ unknown brands of the same category to see if there’s a better alternative. For unknown brands studied in this research, the above mentioned store image effect does not apply, and this may explain why retailer image plays a relatively smaller role in influencing consumers quality judgements and intention to purchase of unknown brands.

Acquiring shelf space from high-end vendors may be expensive. Considering limited budget available for marketing, investment decisions should be made in the most cost-effective way. In practical terms, the experimental results suggest a small effect of retailer image on perceived quality and purchase intention indicating that investing extra funds to squeeze unknown brands into higher end market may not bring as much in return as utilizing other diagnostic cues. Brand managers must spend wisely and carefully allocate their resources into appropriate pricing and innovative packaging while giving consideration to find the retailers with the highest cost/return ratio for distribution. Doing so may suggest that brand managers of unknown brands choose retailers with a medium-range image with moderate costs rather than high-end retailers with significant costs.

5.5 TPO ENDORSEMENT

The influence of TPO endorsements on sales of the endorsed products has been mentioned in academic literature and marketing reports (Chen & Xie, 2005). The ability of TPO endorsements to increase sales of endorsed products may lead companies to believe that including TPO endorsements in their advertisements is an optimal marketing strategy. Our results has shown that TPO endorsement does not influence consumers' perceived quality of the products and could not subsequently increase consumers intention to purchase unknown brands. One explanation is that food safety has been a major concern for China after the notorious milk contamination incident in 2008 (Qian et al., 2011). All the contaminated milk brands were endorsed by celebrities in China and highly reputable third party organizations. The incident did not only hurt the milk industry but may also have brought a disastrous effect to the "trust" factor from the endorsement from the "highly" reputable third parties. Consumers may still believe that third party organizations are willing to provide fair and non-prejudice ratings on the food product but they may also have concerns that the food suppliers may always find a way to "cheat" the system. Due to the lack of "trust" in such endorsement, it is evident that marketing managers of unknown brands should not waste their resources in gaining high ratings from third party organizations even though the TPO may have a very high reputation.

5.6 THE INTERACTION EFFECT

The combination of price similarity cue and package similarity cue were found to be interacted to affect consumers perceived product quality and purchase intention. The significant price similarity x package similarity combination shows a large effect and therefore confirms the results are not only statistically significant but also practically meaningful. More specifically, price similarity posits a larger effect on perceived quality and purchase intention when the package similarity is lower and this effect will diminish with the increase of package similarity. In other words, although price similarity significantly increases consumers' perceived quality and purchase intention, it had most effect when there was minimal similarity between the package of unknown brands and famous brands.

Our findings have both theoretical and practical significance. Theoretically, recognizing the existence of the interactions among important extrinsic cues of unknown brands is crucial for interpreting results from prior studies. Past inconsistent findings may be due to this interaction effect. In practical terms, our results suggest that the increase of package similarity confuses consumers' judgement of the unknown brands' quality and they therefore rely more on other diagnostic cues such as price similarity to make purchase decisions. Therefore, if the unknown brands' marketers decide to imitate the package of the national brands, they should design their pricing strategy carefully and stay as close to the anchor price as possible. On the other hand, although price similarity exhibits a smaller effect on perceived quality and purchase intention when the package similarity condition is low, the simple linear effect still suggests that pricing at a reasonable higher price comparing to other generic brands is able to generate extra profit by increasing the consumers' intention to purchase.

5.7 LIMITATIONS AND FUTURE RESEARCH

Our study had several limitations, some were due to the methodology, and others came from our choices and compromises. One was that the scenarios may not have provided a real-world context for the respondents. Another was that the limited product categories chosen in the research. Future research should study unknown brands in different product categories and compare whether different results may present. Furthermore, the study chose four diagnostic cues based on relevant literature while some other important product diagnostic cues were omitted if they were not addressed in previous literature. Future research should carry out interviews with consumers in China to explore diagnostic cues of unknown brands on consumers' decision making more comprehensively. Given the heterogeneity nature of the Chinese market, the researcher also recommends more data to be collected from different geographic locations to improve the representativeness of the samples. In regards to price similarity, similarity in price could be a double-edged sword. While narrowing the price gap contributes to perceived quality of unknown brands, intention to buy may drop once prices increase. This case may be particularly true for high-value products. Once the price gap narrows to a certain level, consumers will more likely to buy a leading brand in order to gain a symbolic value (e.g. an icon of success). The price gap here is actually the equity of a leading brand. Therefore the "value" becomes more important in such situation; it would be beneficial for future research include perceived value for money as a construct. As for package similarity, a differential package design may make products with unknown brands more visually appealing in a certain market segment for variety-seeking consumers. The distinctiveness in packaging may attract more attention for fast moving consumer goods in supermarkets comparing to products of other categories, future research could compare the effect of similarity/distinctive packaging across different product categories to observe the

difference and draw more conclusive managerial implications. At last, manipulations of variables potentially limited our results. Future research could study variables with more levels of manipulation and observe whether regression exhibit curve effect instead of simple linear effect.

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APPENDICES

APPENDIX A

Survey Instrument Pre-test (English Version)



University of Tasmania

PARTICIPANT INFORMATION SHEET

A Study of the Effect of Product Information Cues on Consumers' Purchase Decision Making of Unknown Brands

Researcher's name: Xuesong (Marcus), BAI
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Email: baix@utas.edu.au

Supervisor's name: Dr.Fan, Liang; Dr. Rob, Hecker

Invitation to participate

You are kindly invited to participate in this research project concerning the Effect of Product Information Cues on Consumers' Purchasing Decision Making of Unknown Brands. This study is being conducted in partial fulfilment of a Phd for Xuesong, Bai, under the supervision of Dr.Fan, Liang and Dr. Rob, Hecker. Participation is voluntary and you are free to withdraw from the questionnaire at any stage without any effects now or in the future. Completion of the survey by you will be taken as your implicit consent to participate.

The purpose of this research project

The primary aim of this research project is to identify the key information product cues that determine consumers' purchasing intention for consuming products carrying an unknown brand name and provide implications for marketers to develop marketing strategies.

What participants are expected to do?

Your participation involves answering questions regarding your experiences with a virtual team. The survey should take around 15 minutes to complete. There are no known or anticipated risks to participation in this study.

Privacy protection

This survey will remove responses from identifiable information of all kinds. Individual responses will be kept confidential by the researcher and not be identified in the reporting of the research. All data, both paper and electronic data, will be securely stored for five years after publication of the research and will then be securely destroyed.

Research outcome

The Research summary of results and outcomes will be available on website “[http://blog.163.com/tascbresearch](http://blog.utas.edu.au/2014/12/31/tascbresearch)” approximately from 31/12/2014.

Contact Information

This study has been approved by the Tasmanian Social Sciences Human Research Ethic Committee. If you have concerns or complaints about the conduct of this study, please contact the Executive Officer of the HREC (Tasmania) Network on (03) 62267479 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. Please quote ethics reference number H12177.

Experiment 1-1

Based on the information given, please tick from 1 (Strongly Disagree) to 7 (Strongly Agree):

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
<u>A: Brand: WAHAHA</u>							
A1. I know the brand “WAHAHA” very well	1	2	3	4	5	6	7
A2. I believe the quality of “WAHAHA” products is very high	1	2	3	4	5	6	7
A3. I believe it is worthwhile to purchase “WAHAHA” products	1	2	3	4	5	6	7
<u>B: Brand: GOLD BULL</u>							
B1. I know the brand “GOLD BULL” very well	1	2	3	4	5	6	7
B2. I believe the quality of “GOLD BULL” products is very high	1	2	3	4	5	6	7
B3. I believe it is worthwhile to purchase “GOLD BULL” products	1	2	3	4	5	6	7
<u>C: Brand: HONG QUAN</u>							
C1. I know the brand “HONG QUAN” very well	1	2	3	4	5	6	7
C2. I believe the quality of “HONG QUAN” products is very high	1	2	3	4	5	6	7
C3. I believe it is worthwhile to purchase “HONG QUAN” products	1	2	3	4	5	6	7
<u>D: Brand: Coca Cola</u>							
D1. I know the brand “Coca Cola” very well	1	2	3	4	5	6	7
D2. I believe the quality of “Coca Cola” products is very high	1	2	3	4	5	6	7
D3. I believe it is worthwhile to purchase “Coca Cola” products	1	2	3	4	5	6	7
<u>E: Brand: Thirsty Cola</u>							
E1. I know the brand “Thirsty Cola” very well	1	2	3	4	5	6	7

E2. I believe the quality of “Thirsty Cola” products is very high	1	2	3	4	5	6	7
E3. I believe it is worthwhile to purchase “Thirsty Cola” products	1	2	3	4	5	6	7
<u>F: Brand: Excitement</u>							
F1. I know the brand “Excitement” very well	1	2	3	4	5	6	7
F2. I believe the quality of “Excitement” products is very high	1	2	3	4	5	6	7
F3. I believe it is worthwhile to purchase “Excitement” products	1	2	3	4	5	6	7

Experiment 2-1

Based on your understanding of the retailers, please tick from 1 (Strongly Disagree) to 7 (Strongly Agree):

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
<u>A: Retailer Name: Carrefour China</u>							
A1.I think “Carrefour China” has a very good reputation	1	2	3	4	5	6	7
A2.The products in “Carrefour China” stores are good value for money	1	2	3	4	5	6	7
A3.The interior decoration of “Carrefour China” stores make me feel pleasant	1	2	3	4	5	6	7
A4.I have positive attitude to “Carrefour China” stores	1	2	3	4	5	6	7
<u>B: Retailer Name: Merry-Mart</u>							
B1. I think “Merry-Mart” has a very good reputation	1	2	3	4	5	6	7

B2. The products in “Merry-Mart” stores are good value for money	1	2	3	4	5	6	7
B3. The interior decoration of “Merry-Mart” stores make me feel pleasant	1	2	3	4	5	6	7
B4. I have positive attitude to “Merry-Mart” stores	1	2	3	4	5	6	7
<u>C: Retailer Name: Wu-Mart</u>							
C1. I think “Wu-Mart” has a very good reputation	1	2	3	4	5	6	7
C2. The products in “Wu-Mart” stores are good value for money	1	2	3	4	5	6	7
C3. The interior decoration of “Wu-Mart” stores make me feel pleasant	1	2	3	4	5	6	7
C4. I have positive attitude to “Wu-Mart” stores	1	2	3	4	5	6	7
<u>D: Retailer Name: New-Mart Kingson</u>							
D1. I think “New-Mart Kingson” has a very good reputation	1	2	3	4	5	6	7
D2. The products in “New-Mart Kingson” stores are good value for money	1	2	3	4	5	6	7
D3. The interior decoration of “New-Mart Kingson” stores make me feel pleasant	1	2	3	4	5	6	7
D4. I have positive attitude to “New-Mart Kingson” stores	1	2	3	4	5	6	7
<u>E: Retailer Name: Lotus</u>							
E1. I think “Lotus” has a very good reputation	1	2	3	4	5	6	7
E2. The products in “Lotus” stores are good value for money	1	2	3	4	5	6	7
E3. The interior decoration of “Lotus” stores make me feel pleasant	1	2	3	4	5	6	7
E4. I have positive attitude to “Lotus” stores	1	2	3	4	5	6	7
<u>F: Retailer Name: BHG Market Place</u>							
G1. I think “BHG Market Place” has a very good reputation	1	2	3	4	5	6	7
G2. The products in “BHG Market Place” stores are good value for money	1	2	3	4	5	6	7

G3. The interior decoration of “BHG Market Place” stores make me feel pleasant	1	2	3	4	5	6	7
G4. I have positive attitude to “BHG Market Place” stores	1	2	3	4	5	6	7

Experiment 2-2

Based on your observation of the following product packages, please tick from 1 (Strongly Disagree) to 7 (Strongly Agree):



Product A



Product B



Product C

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
Please compare the packages of product A, and B then answer:							
A1.The package presented by A looks a lot like the package presented by B.	1	2	3	4	5	6	7
A2.The overall look of product A package greatly resembles the product B package.	1	2	3	4	5	6	7
Please compare the packages of product A and C, then answer:							
B1. The package presented by A looks a lot like the package presented by C.	1	2	3	4	5	6	7
B2. The overall look of product A package greatly resembles the product C package.	1	2	3	4	5	6	7

APPENDIX B

Survey Instrument Pre-test (Chinese Version)



问卷调查说明

消费者对非知名饮料品牌购买意愿的研究

邀请参与

我们盛情邀请您参加这项关于从产品外在线索的角度研究其对消费者购买非知名品牌意愿影响的研究。这项研究是白雪松同学攻读博士学位需要完成的一个部分，由 Fan.Liang 博士和 Rob. Hecker 博士共同指导进行。您对于本研究的参与完全自愿，您有权在任何时间任何阶段自由退出这个调查问卷，并且不会对您现在和将来产生任何影响。如果您选择完成这份问卷，我们将默认为您支持并愿意参与这个项目。我诚挚的感谢您对于我博士研究的无私帮助。

该项目的研究目的

本研究的目的是找出影响消费者购买非知名品牌意愿的关键外在因素，本研究项目将为非知名品牌的拥有者和营销者提供发展市场营销战略方面的启示，也将帮助这些非知名品牌在未来市场中有更好的发展。

参与者需要怎么做

您的参与将包括回答一些我们提供的问卷。问卷大概需要花费您只有 8-10 分钟的时间。并且填写问卷没有任何潜在风险。

隐私保密

本研究中作者将实施严格的保密原则，本问卷中不包含任何可以显示回答者身份的信息。本次研究所获取的以纸张形式或者电子形式的任何数据，将在研究成果发表后安全存放五年，然后由作者彻底，安全地销毁。

研究结果

本研究成果的总结报告将在以下网站上公布。

<http://blog.163.com/tascbresearch>

联系信息

如您对此项研究有疑问，请联系白雪松 baix@utas.edu.au。塔斯马尼亚的社会科学人类研究伦理委员会已经批准了这项研究。如果您对开展这项研究有疑问或者投诉，请联络该委员会的执行主管 +613 62267479，或者电邮 human.ethics@utas.edu.au。该委员会授权此执行主管来处理有关投诉。如您投诉，请说明本研究项目的参考编号 H12177。

如果您乐意完成调查问卷，请继续。

实验 1-1:

以下品牌均为市场上流通的饮料品牌，请根据您对各品牌的了解圈出您认为最佳的答案

	强烈 不同 意	比 较 不 同 意	稍 微 不 同 意	观 点 中 立	稍 微 同 意	比 较 同 意	强 烈 同 意
A: 饮料品牌名称: 娃哈哈							
A1.我很了解“娃哈哈”这个品牌	1	2	3	4	5	6	7
A2.我觉得“娃哈哈”这个品牌的质量很好	1	2	3	4	5	6	7
A3.我购买“娃哈哈”产品的意愿很强烈	1	2	3	4	5	6	7
B: 饮料品牌名称: 金牛							
B1.我很了解“金牛”这个品牌	1	2	3	4	5	6	7
B2.我觉得“金牛”这个品牌的质量很好	1	2	3	4	5	6	7
B3.我购买“金牛”产品的意愿很强烈	1	2	3	4	5	6	7
C: 饮料品牌名称: 宏泉							
C1.我很了解“宏泉”这个品牌	1	2	3	4	5	6	7
C2.我觉得“宏泉”这个品牌的质量很好	1	2	3	4	5	6	7
C3.我购买“宏泉”产品的意愿很强烈	1	2	3	4	5	6	7
D: 饮料品牌名称: 可口可乐							
D1.我很了解“可口可乐”这个品牌	1	2	3	4	5	6	7
D2.我觉得“可口可乐”这个品牌的质量很好	1	2	3	4	5	6	7
D3.我购买“可口可乐”产品的意愿很强烈	1	2	3	4	5	6	7
E: 饮料品牌名称: 口渴可乐							
E1.我很了解“口渴可乐”这个品牌	1	2	3	4	5	6	7
E2.我觉得“口渴可乐”这个品牌的质量很好	1	2	3	4	5	6	7
E3.我购买“口渴可乐”产品的意愿很强烈	1	2	3	4	5	6	7
F: 饮料品牌名称: 激动							
F1.我很了解“激动”这个品牌	1	2	3	4	5	6	7
F2.我觉得“激动”这个品牌的质量很好	1	2	3	4	5	6	7
F3.我购买“激动”产品的意愿很强烈	1	2	3	4	5	6	7

实验 2-1:

请根据您的对零售商的了解圈出您认为最佳的答案:

	强 烈 不 同 意	比 较 不 同 意	稍 微 不 同 意	观 点 中 立	稍 微 同 意	比 较 同 意	强 烈 同 意
A: 经销商名称: 家乐福							
A1.我觉得“家乐福”的服务非常好	1	2	3	4	5	6	7
A2.我觉得“家乐福”卖的东西物有所值	1	2	3	4	5	6	7
A3.我觉得“家乐福”内部的装修让我感觉很舒服	1	2	3	4	5	6	7
A4.我觉得我对“家乐福”这个品牌持有积极的态度	1	2	3	4	5	6	7
B: 经销商名称: 美廉美							
B1.我觉得“美廉美”的服务非常好	1	2	3	4	5	6	7
B2.我觉得“美廉美”卖的东西物有所值	1	2	3	4	5	6	7
B3.我觉得“美廉美”内部的装修让我感觉很舒服	1	2	3	4	5	6	7
B4.我觉得我对“美廉美”这个品牌持有积极的态度	1	2	3	4	5	6	7
C: 经销商名称: 物美							
C1.我觉得“物美”的服务非常好	1	2	3	4	5	6	7
C2.我觉得“物美”卖的东西物有所值	1	2	3	4	5	6	7
C3.我觉得“物美”内部的装修让我感觉很舒服	1	2	3	4	5	6	7
C4.我觉得我对“物美”这个品牌持有积极的态度	1	2	3	4	5	6	7
D: 经销商名称: 大商千盛							
D1.我觉得“大商千盛”的服务非常好	1	2	3	4	5	6	7
D2.我觉得“大商千盛”卖的东西物有所值	1	2	3	4	5	6	7
D3.我觉得“大商千盛”内部的装修让我感觉很舒服	1	2	3	4	5	6	7
D4.我觉得我对“大商千盛”这个品牌持有积极的态度	1	2	3	4	5	6	7
E: 经销商名称: 易初莲花							
E1.我觉得“易初莲花”的服务非常好	1	2	3	4	5	6	7
E2.我觉得“易初莲花”卖的东西物有所值	1	2	3	4	5	6	7
E3.我觉得“易初莲花”内部的装修让我感觉很舒服	1	2	3	4	5	6	7
E4.我觉得我对“易初莲花”这个品牌持有积极的态度	1	2	3	4	5	6	7
F: 经销商名称: 华联精品超市							

G1.我觉得“华联精品超市”的服务非常好	1	2	3	4	5	6	7
G2.我觉得“华联精品超市”卖的东西物有所值	1	2	3	4	5	6	7
G3.我觉得“华联精品超市”内部的装修让我感觉很舒服	1	2	3	4	5	6	7
G4.我觉得我对“华联精品超市”这个品牌持有积极的态度	1	2	3	4	5	6	7

实验 2-2：

请根据您所看到的商标回答下列问题：



产品 A



产品 B



产品 C

	强烈 不同 意	比较 不同 意	稍微 不同 意	观点 中立	稍微 同意	比较 同意	强烈 同意
请对比产品 A 和产品 B 的包装， 回答下列问题							
A1.产品 B 的包装和产品 A 的包装看起来很像	1	2	3	4	5	6	7
A2.产品 B 的包装和产品 A 的包装有很多特点类似	1	2	3	4	5	6	7
请对比产品 A 和产品 C 的包装， 回答下列问题							
B1.产品 C 的包装和产品 A 的包装看起来很像	1	2	3	4	5	6	7
B2.产品 C 的包装和产品 A 的包装有很多特点类似	1	2	3	4	5	6	7

APPENDIX C

Survey Instrument Main Study (English Version)

Part 1:

Based on the information given, please tick from 1 (Strongly Disagree) to 7 (Strongly Agree):

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1. I think the products A and B are priced similarly.	1	2	3	4	5	6	7
2. I can hardly notice any differences between the prices of product A and B.	1	2	3	4	5	6	7
3. Paying price of A or paying price of B does not seem to have any difference to me.	1	2	3	4	5	6	7
4. I can afford paying price A as much as I can afford paying price B.	1	2	3	4	5	6	7
5. The theme of package between A & B looks very similar.	1	2	3	4	5	6	7
6. The colour of the package A & B looks very similar.	1	2	3	4	5	6	7
7. It is hard to tell the difference between visual characteristics of the packages of A & B.	1	2	3	4	5	6	7
8. The overall look of product A greatly resembles the overall look of product B.	1	2	3	4	5	6	7
9. The logo of product A & B looks very similar.	1	2	3	4	5	6	7
10. The brand name of product A & B sounds very similar.	1	2	3	4	5	6	7
11. The package sizes of products A & B looks very similar.	1	2	3	4	5	6	7
12. The package shapes of products A & B looks very similar.	1	2	3	4	5	6	7
13. I believe the third party endorsement is	1	2	3	4	5	6	7

trustworthy.							
14. I believe the third party endorsement is honest.	1	2	3	4	5	6	7
15. I believe the third party endorsement is sincere.	1	2	3	4	5	6	7
16. Knowing the fact that products are sold at this store, I feel that A has a very good quality.	1	2	3	4	5	6	7
17. The store offers a variety of products.	1	2	3	4	5	6	7
18. The products in the store are good value for money.	1	2	3	4	5	6	7
19. The store provides very good customer service.	1	2	3	4	5	6	7
20. The interior decoration of the store usually let me feel pleasant atmosphere.	1	2	3	4	5	6	7
21. I believe the third party endorsement ratings are fair.	1	2	3	4	5	6	7
22. I would absolutely consider buying this brand.	1	2	3	4	5	6	7
23. I would definitely expect to buy this brand.	1	2	3	4	5	6	7
24. I believe it is worthwhile to buy this brand.	1	2	3	4	5	6	7
25. I would buy this brand/product in the future.	1	2	3	4	5	6	7

Part 2:

Please circle the answer that best describes you:

1. Your gender is:

1. Male 2. Female

2. Your current age is

1. 18 - 25 2. 26 - 35 3. 36 - 49 4. over 50

3. Your monthly income:

1. ¥0-1500 2. ¥1501-4500. 3. ¥4501-9000 4. over ¥9000

4. Your education level is:

1. Secondary school or High school 2. Bachelor
3. Master or Higher 4. None of the above

Thank you for your time!


APPENDIX D

Survey Instrument Main Study (Chinese Version)


中文问卷调查样本

第一部分

1. 请根据下面给出的产品信息圈出每个问题答案中您认为最合适的选项：

产品名称：脉动	
厂商：百事可乐公司	
价格：人民币 10 元	

产品 A

产品名称：___	
经销商：___	
价格：___	
认证：___	

产品 B

强 比 稍 观 稍 比 强
烈 较 微 点 微 较 烈
不 不 不 中 同 同 同
同 同 同 立 意 意 意
意 意 意

1. 我觉得品牌“A”和品牌“B”价格很相似。	1	2	3	4	5	6	7
2. 我几乎感觉不出来品牌“A”和品牌“B”价格上有任何区别。	1	2	3	4	5	6	7
3. 单从价格方面考虑，我觉得购买品牌“A”和购买品牌“B”没有什么区别。	1	2	3	4	5	6	7
4. 我在经济上对于购买品牌“A”和品牌“B”的承受能力差不多。	1	2	3	4	5	6	7
4. 品牌“A”的包装主题和品牌“B”的包装主题很相似。	1	2	3	4	5	6	7
5. 品牌“A”的包装颜色和品牌“B”的包装颜色很相似。	1	2	3	4	5	6	7
6. 从视觉上很难区分品牌“A”和品牌“B”的包装。	1	2	3	4	5	6	7
7. 产品“A”的包装和产品“B”的包装有很多特点类似。	1	2	3	4	5	6	7
8. 品牌“A”的商标和品牌“B”的商标看起来很相似。	1	2	3	4	5	6	7
9. 品牌“A”的名称和品牌“B”的名称听起来很类似。	1	2	3	4	5	6	7
10. 品牌“A”和品牌“B”的包装尺寸相似。	1	2	3	4	5	6	7

11. 品牌“A”和品牌“B”的包装形状类似。	1	2	3	4	5	6	7
12. 对于品牌“B”，我认为其第三方认证机构可以信任。	1	2	3	4	5	6	7
13. 对于品牌“B”，我认为其第三方认证机构很诚实。	1	2	3	4	5	6	7
14. 对于品牌“B”，我认为其第三方机构的认证很真实。	1	2	3	4	5	6	7
15. 对于品牌“B”，我相信其第三方机构的认证很公平。	1	2	3	4	5	6	7
16. 对于品牌“B”，我认为其经销商销售的产品质量很好。	1	2	3	4	5	6	7
17. 对于品牌“B”，我认为其经销商销售的产品种类繁多。	1	2	3	4	5	6	7
18. 对于品牌“B”，我认为其经销商销售的产品物有所值。	1	2	3	4	5	6	7
19. 对于品牌“B”，我认为其经销商商店内部装修让顾客感觉很愉悦。	1	2	3	4	5	6	7
20. 对于品牌“B”，该产品拥有高质量的可能性很高。	1	2	3	4	5	6	7
21. 对于品牌“B”，该产品的可信赖度非常高。	1	2	3	4	5	6	7
22. 根据已知的信息，我绝对会考虑购买品牌“B”。	1	2	3	4	5	6	7
23. 根据已知的信息，我预计会购买品牌“B”。	1	2	3	4	5	6	7
24. 根据已知的信息，我认为品牌“B”值得购买。	1	2	3	4	5	6	7
25. 根据已知的信息，我觉得我会在未来购买品牌“B”。	1	2	3	4	5	6	7

第二部分

请根据个人情况选择最适合您的答案：

1. 您的性别为：

- A. 男性 B. 女性

2. 您的年龄为：

- A. 18-25 岁 B. 26-35 岁 C. 36-49 岁 D. 大于 50 岁

3. 您的家庭月收入为：

- A. ¥ 0-1500 B. ¥ 1501-4500 C. ¥ 4501-9000 D. 多于 ¥ 9000 元

4. 您完成的最高学历为：

- A. 硕士或博士 B. 大学 C. 初中或高中 D. 其他


感谢您的时间，问卷到此结束！


APPENDIX E


Survey Instrument


16 Experimental Conditions


SIXTEEN CONDITIONS FOR MAIN EXPERIMENT


产品名称： <u>激动</u>	
经销商：华联精品	
价格：人民币 9.5 元	
认证：中国消费者协会	


产品名称： <u>激动</u>	
经销商：华联精品	
价格：人民币 9.5 元	
认证：中国食品资讯	


产品名称： <u>激动</u>	
经销商：华联精品	
价格：人民币 4.5 元	
认证：中国消费者协会	

产品名称： <u>激动</u>	
经销商：华联精品	
价格：人民币 4.5 元	
认证：中国食品资讯	

产品名称： <u>激动</u>	
经销商：美廉美	
价格：人民币 9.5 元	
认证：中国消费者协会	

产品名称： <u>激动</u>	
经销商：美廉美	
价格：人民币 9.5 元	
认证：中国食品资讯	

产品名称： <u>激动</u>	
经销商：美廉美	
价格：人民币 4.5 元	
认证：中国消费者协会	

产品名称： <u>激动</u>	
经销商：美廉美	
价格：人民币 4.5 元	
认证：中国食品资讯	

产品名称: <u>BULE</u>	
经销商: 华联精品	
价格: 人民币 9.5 元	
认证: 中国消费者协会	

产品名称: <u>BULE</u>	
经销商: 华联精品	
价格: 人民币 9.5 元	
认证: 中国食品资讯	

产品名称: <u>BULE</u>	
经销商: 华联精品	
价格: 人民币 4.5 元	
认证: 中国消费者协会	

产品名称: <u>BULE</u>	
经销商: 华联精品	
价格: 人民币 4.5 元	
认证: 中国食品资讯	

产品名称: <u>BULE</u>	
经销商: 美廉美	
价格: 人民币 9.5 元	
认证: 中国消费者协会	

产品名称: <u>BULE</u>	
经销商: 美廉美	
价格: 人民币 9.5 元	
认证: 中国食品资讯	

产品名称: <u>BULE</u>	
经销商: 美廉美	
价格: 人民币 4.5 元	
认证: 中国消费者协会	

产品名称: <u>BULE</u>	
经销商: 美廉美	
价格: 人民币 4.5 元	
认证: 中国食品资讯	